Booklet Maker BM 2000

Operator Manual

Doc No. T10178

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BOOKLET MAKER BM 2000

Operating Instruction
Booklet Maker Reference

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⚠ WARNING:

- **Electromagnetic compliance:**
  - **This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.**
  - **The product (System) which is connected to this machine will be class A.**

Note

The domestic environment is an environment where the use of broadcast radio and television recievers may be expected within a distance of 10 m of the apparatus concerned.

Introduction

This manual contains instructions on the operation and maitenance of this machine. To get the maximum versatility from this machine all operators should carefully read and follow the instructions in this manual. Keep this manual in a handy place near the machine.

Please read the Safety Information before using this machine. It contains information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

How to read this manual

Notation conventions

Whenever necessary, the following points for attention are indicated in this manual.

⚠ WARNING:
Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

⚠ CAUTION:
Indicates a potentiality hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to machine or property.

Note
This sign refers to:

- Remarks for making the operation much easier. You get practical hints or knowledge to assist you in the machine operation such as:
  - Preparations required before operating
  - How to prevent papers from being misfed or damaged
  - Precautions required or actions to take after misoperation
- Limitations like numerical limits, functions that cannot be used together or conditions, under which a particular function cannot be used or obtained.
- Information.

[ ]
Keys that appear on the machine's display panel.

Safety Information

When using this machine, following safety precautions should always be followed.

Safety during operation

⚠ **WARNING**:

- **To avoid hazardous situations like for instance electric shock or danger while exposed to moving, rotating or cutting devices, do not remove any covers, guards or screws other than those specified in this manual.**
- **Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following conditions exists:**
  - **You drop objects or spill something into the equipment.**
  - **You suspect that your equipment needs service or repair.**
  - **Your equipment's covers has been damaged.**
  - **You notice unusual noises or odours when operating the equipment.**
  - **If the power cable or plug becomes worn out or otherwise damaged.**
  - **Before cleaning and care (unless otherwise specifically instructed).**
- **Electromagnetic compliance:**
  - **This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.**
  - **The product (System) which is connected to this machine will be class A.**

General safety

⚠ **WARNING**:

- **Always connect the equipment to a properly grounded power source (wall outlet). If in doubt, have the power source checked by a qualified electrician.**
- **Improper grounding of the equipment can result in electrical shock. Never connect the machine to a power source that lacks a ground connection terminal. This machine is destined for specific purpose only. Any use going beyond this specific purpose is regarded as beyond the determination. The manufacturer will not be liable for damages resulting from any use beyond the determination, unallowed operation, respectively. The user alone bears the risk.**
- **Do not make arbitrary changes or modifications to the machine. The manufacturer will not be liable for modifications made at the machine on your own and damages resulting thereof. EC declaration of conformity and the mark CE will be invalidated, if you make changes at the machine or at the individual components.**
- **Do not override or bypass electrical or mechanical interlock devices.**
- **The machine is to be used only by authorized and instructed persons. The responsibilities on operating the machine have to be strictly laid down and observed so that there are no unclear competences regarding safety aspects.**
- **Vent holes serve for air circulation to protect the machine from overheating. Make sure that the holes are not covered.**
- **Do not expose fingers or other parts of the body to moving, rotating or cutting devices such as for instance between upper and lower trimmer knives.**
- **Allways locate the equipment on a solid support surface with adequate strength tor the weight of the machine.**

⚠ CAUTION:

- The machine and its peripherals must be installed and maintained by a customer service representative who has completed the training course on those models.
- Allways follow all warnings marked on, or supplied with, the equipment.
- When you disconnect the power plug from the wall outlet, allways pull the plug (not the cable).
- Disconnect the power cord before you move the machine. While moving the machine, allways exercise care and make sure that the power cord will not be damaged under the machine.
- Allways contact service if relocating the equipment.
- Do not move the machine while the machine is running.
- Do not open covers while the machine is running.
- Do not switch of the power while the machine is running. Make sure the machine cycle has ended.
- Lay the power cord in a way that nobody will stumble over it. Do not place things on the cord.
- Never attempt any maintenace function that is not specifically described in this documentation.
- Always keep magnets and all devices with strong magnetic fields away from the machine.
- If the place of installation is air-conditioned or heated, do not place the the machine where it will be:
  - Subject to sudden temperature changes.
  - Directly exposed to cool air from an air-conditioner.
  - Directly exposed to heat from a heater.
- If the machine is not used over an extended period of time it should be unplugged to prevent damage in the case of overload.

Note

- The indications like front and rear, left and right refer to the paper transport direction.
- The operator manual always has to be available at the place of use of the machine.
- In the interest of technical development the company reserves the right to make alterations to specifications without prior notice!

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TABLE OF CONTENTS

What You Can Do With This Machine **5**
Guide To Components **7**
Booklet Maker 7
Options **10**
Trimmer 10
SquareFolder 12

1. Basics

Booklet Maker **13**
Turning On / Off the Power 13
Control Panel 14
Staples, Staple Cartridge, Stapler Head & Clinchers 15
Removing / replacing Staple Cartridge 15
Removing / replacing Staple Cartridge, continued 16
Removing / replacing Stapler Head 16
Removing/replacing Stapler Head, continued 17
Changing Staple position and Narrow width Paper Sizes 18
Changing Stapler and Clincher position 18
Setting up narrow width paper sizes 19
Trimmer **20**
Emptying the Trim Bin 20

2. Making Booklets

Changing Settings **21**
General Procedure 21
Setting Paper Size 21
Selecting Standard Paper Sizes 21
Custom Paper Size 22
Stapling and Folding 22
Edge staple 23
Saddle staple 23
Staple and Fold Alignment 23
Corner staple 24
Trimming 24
Selecting Trimming On or Off 24
Adjusting the Cutting Margin 24
SquareFolding 25
General 25
Procedure 25
On-line / Off-line **26**
On-line Mode 26
Off-line Mode 28

3. Admin

The Admin Screen **29**
Paper size check 29
Mode, Safe / Fast 30
System Setup 30
Standard Paper Size 31
Language 31
Service 31

4. Jobs

Storing and Deleting Jobs 33
Storing a Job 33
Recalling a Job 34

5. Clearing a Paper Jam

Clearing a Paper Jam 35
General 35
Booklet Maker 36
Clearing a Paper Jam 36
Inside the Booklet Maker 36
Trimmer 38
Clearing a Paper Jam 38
Clearing Jam in Input Area 38
Clearing Jam in Exit Area 39
SquareFolder 40
Clearing a Paper Jam 40
Inside the SquareFolder 40
Exit Area 40

6. Troubleshooting

Fault codes 41
General 41
Booklet Maker Fault Codes 42
Remove stacked sheets 42
Too many sheets 42
Check Staples 42
Trimmer Fault Codes 42
Close trimmer belts 42
Waste Bin Full 42
Booklet quality 43
Fold Quality 43
SquareFolding Quality 44

7. General Remarks

Do's And Don'ts 45
Placing Your Machine 46
Machine Environment 46
Power Connection 46
Access to Machine 47
Maintaining Your Machines 48
Booklet Maker 48
Lubricating Staplers and Clinchers 48
SquareFolder 49
Cleaning Feed Belts 49
Cleaning Square Folding Clamps 50

8. Specifications

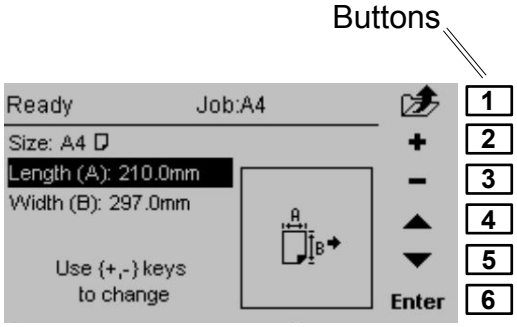
Machine Specifications 51
Booklet Maker BM 2000 51
Trimmer FTR 2000 (option) 52
SquareFolder SQF 2000 (option) 52

What You Can Do With This Machine

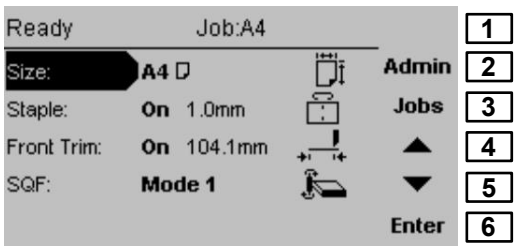
The Booklet Maker BM 2000, Trimmer FTR 2000 and SquareFolder SQF 2000 form a booklet making system that works on-line with Feeder/Collators.

The sheets from the Feeder/Collator are transported into the BM 2000 Booklet Maker and collected in the stapler area of the BM 2000 Booklet Maker. The Booklet Maker now jogs and then staples the set. The set is then transported further to the folding area where the set is folded into a booklet and then fed out to the belt stacker.
When a larger number of sheets are folded an effect called creeping occurs. In order to rectify creep, the FTR 2000 Trimmer (optional) can be connected to the Booklet Maker. The booklets are then transported from the Booklet Maker into the Trimmer where the front edge (face) will be cut off.
Another option, the SQF 2000 SquareFolder, can be installed if a FTR 2000 Trimmer is installed on the BM 2000 Booklet Maker. The prints, which have been stapled, folded and trimmed will be fed into the SQF 2000. The SQF 2000 will flatten the spine of the booklet into a square shape. The booklets will, after passing through the SQF 2000, have the look of a perfect bound book.
The booklets are then fed out to the Belt Stacker.

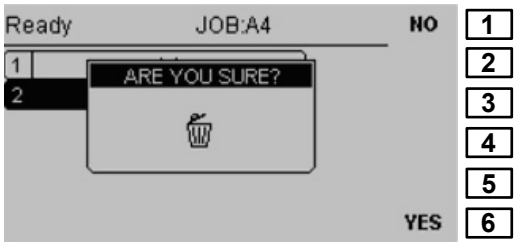
The entire BM 2000 Booklet making system is controlled from a single control panel on the Booklet Maker. The control panel has only six buttons which will allow you to easily set up, adjust and operate the complete system.



The buttons are multi functional, meaning that the function of each button depends on the information displayed.
For example: In this screen, the icon next to button 1 indicates you will go up one level in the menu when the button is pressed.



Example 2: In this screen, button 1 has no function.



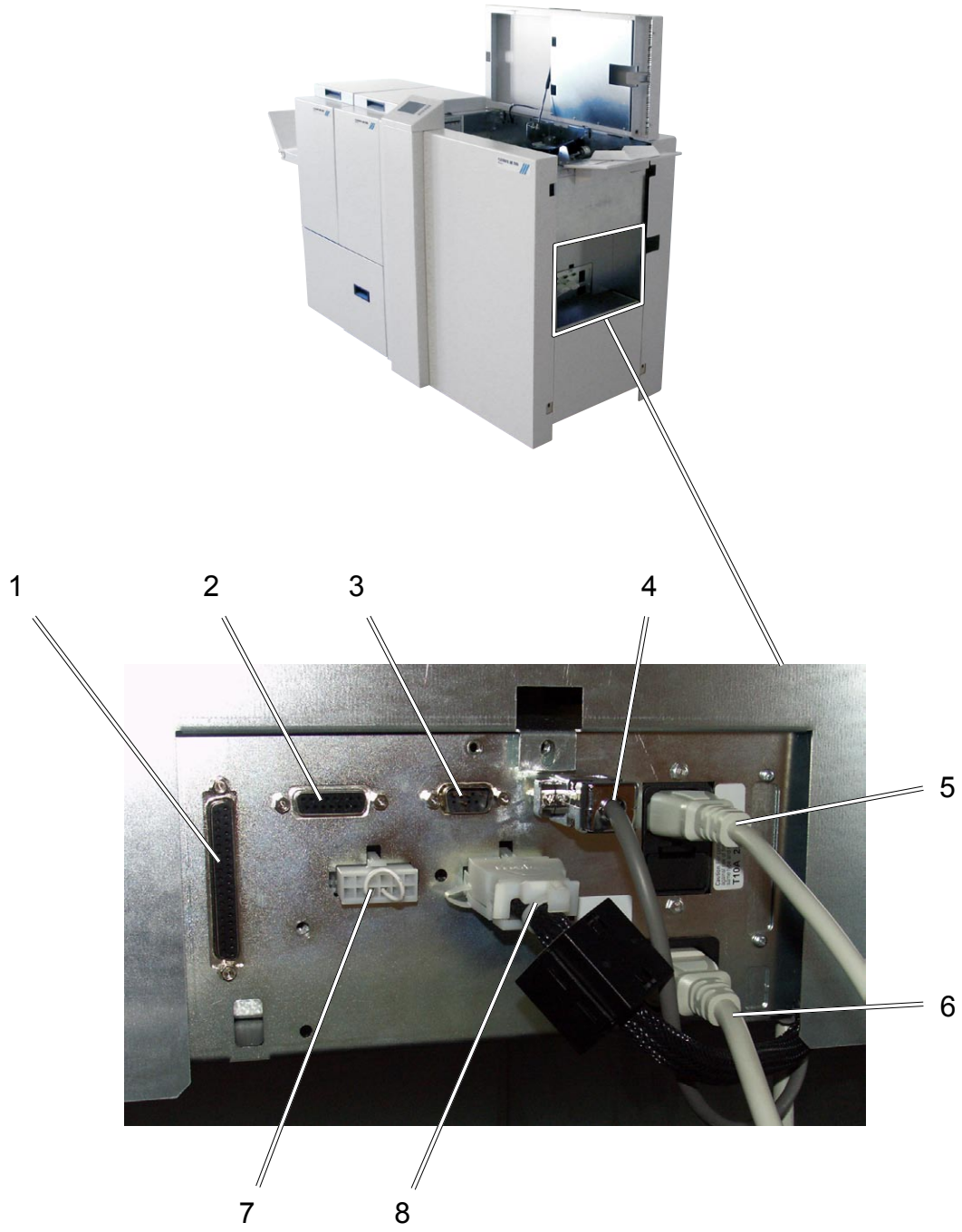
Example 3: Pressing button 1 here will answer “No” to the question on the screen.

Guide To Components

Booklet Maker

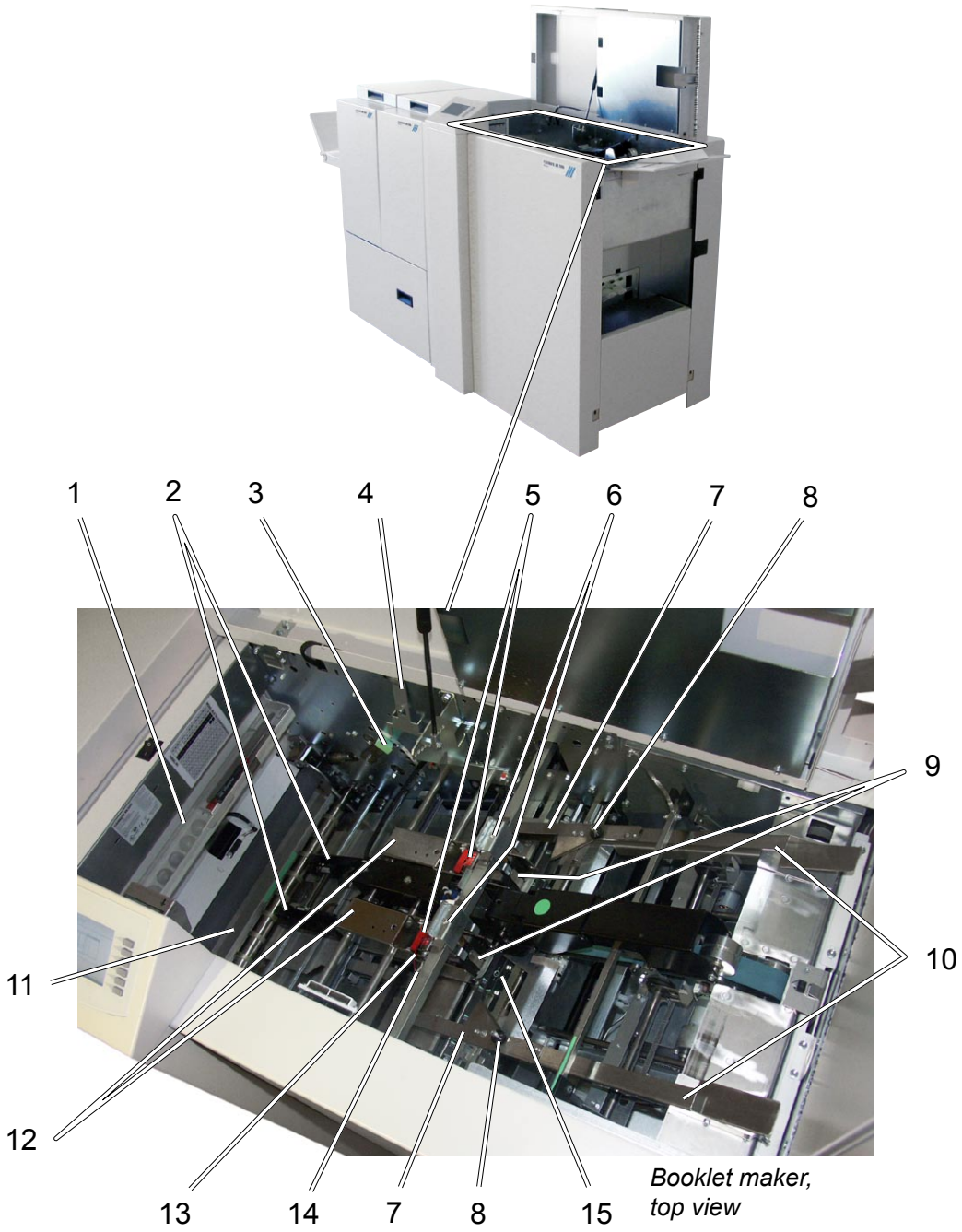
1	Control panel	5	Hand feed tray (optional)
2	Top cover	6	Belt Stacker
3	Power switch	7	Belt Stacker Cover
4	Infeed assembly	8	Hand feed slot (for on-line mode)

Booklet Maker, continued



1 DFA. Not in use.
2 Not in use.
3 CAN In: Termination socket / Communication with Feeder/Collator
4 CAN Out: Termination socket / Communication with FTR 2000
5 Power receptacle
6 Power out to SQF 2000
7 Interlock jumper
8 Interlock jumper / Power out to FTR 2000

Booklet Maker, continued



Booklet maker, top view

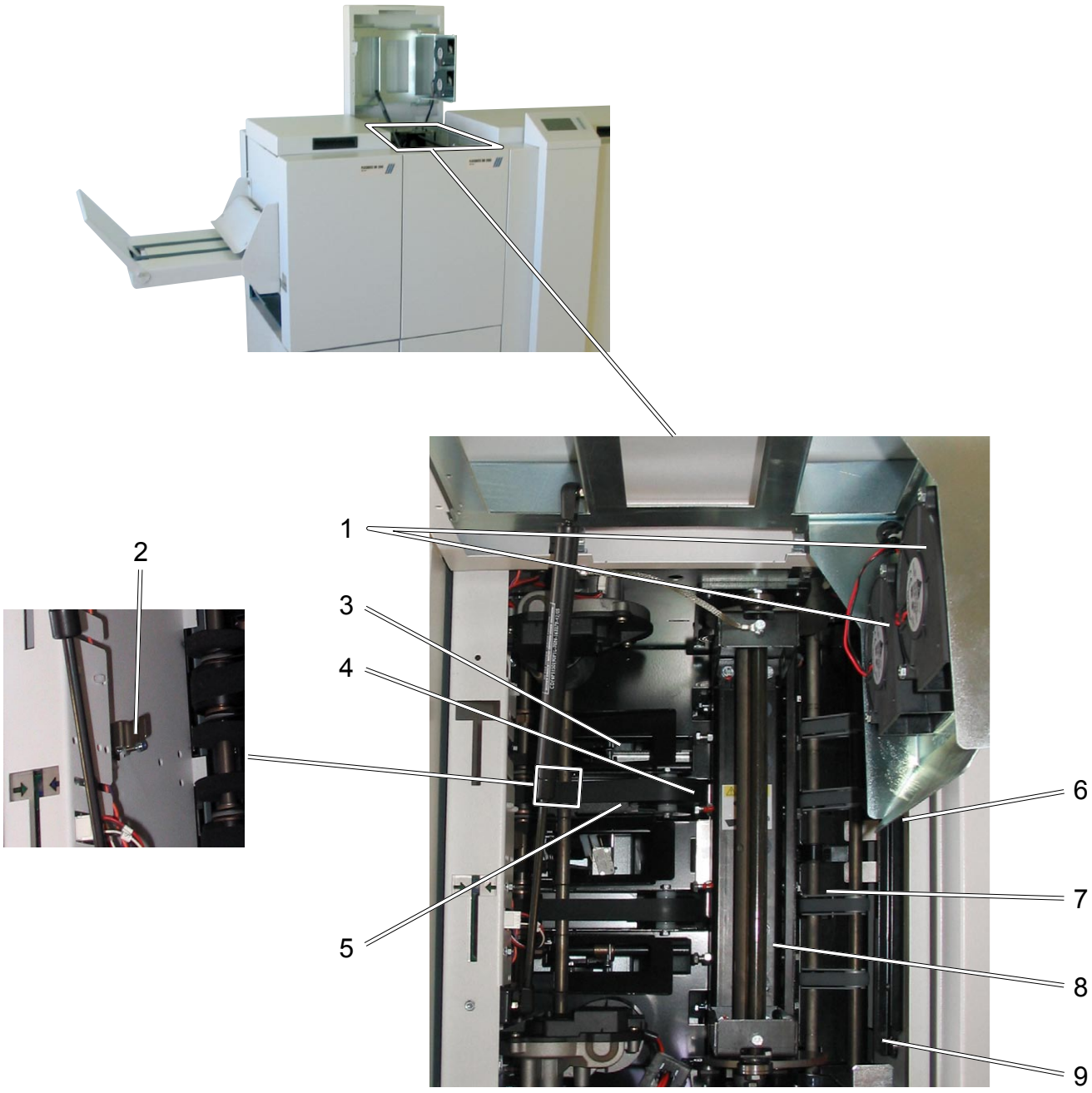
1 Tool box
2 Ball cage
3 Fold adjust lever, right side
Left side not shown in picture
4 Alignment tool, stapler assy.
5 Cartridge locking levers
6 Stapler lift brackets
7 Side guide extension
8 Thumb screw for Side guide extension
9 Stapler heads
10 Side guides
11 Guide
12 Screws for Stapler assy.
13 Staple detection leads, one on each stapler head
14 Locking pin, one on each stapler head
15 Clincher, left side. Right side not shown in picture

Options

Trimmer

1 Top cover
2 Trim bin

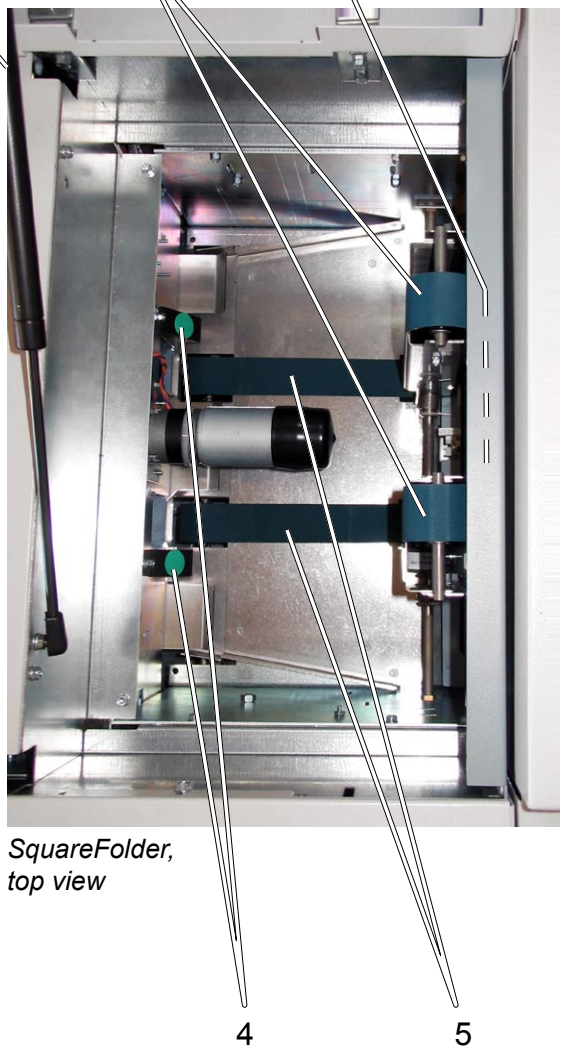
Trimmer, continued



Trimmer, top view

1	Trimmer fan	6	Docking bracket
2	Outfeed latch	7	Infeed roller shaft
3	Transport belt	8	Knives (not visible in picture)
4	Exit compression brackets	9	Infeed latch
5	Trimmer stop		

SquareFolder



SquareFolder, top view

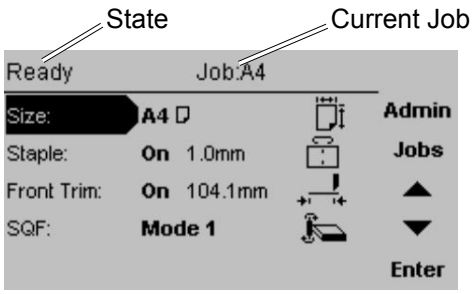
1 Top cover
2 Upper feed belts (lifted position)
3 Docking bracket (not visible in picture
5 Lower feed belts
4 Latches

Booklet Maker

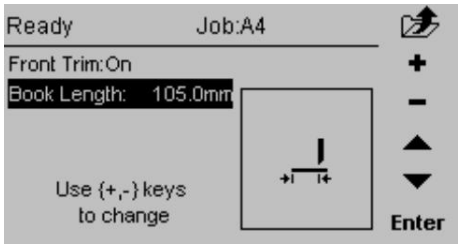
Turning On / Off the Power

1. Plug the Booklet Maker power cord into the wall outlet.
   Trimmer (optional) and SquareFolder (optional) are powered from the Booklet Maker.
2. Open the Top cover (A).
3. Set power switch (B) on Booklet Maker to ON position.
   Note
   The Power switch also controls Trimmer (optional) and SquareFolder (optional).
4. Close the Top cover.

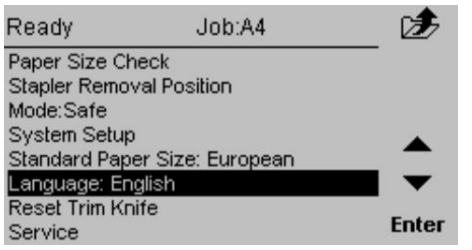
Control Panel



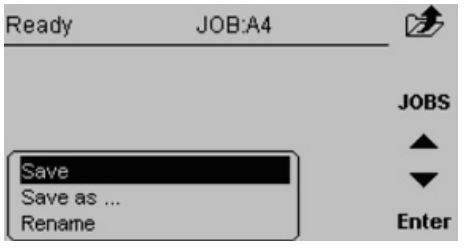
The Main screen.
When the system power is switched on the Main screen will be shown. Here you will find information showing the actual set up. From this screen you can also access other screens, that will help you operate the complete BM 2000 Booklet making system.
At the top, throughout the screens you can see the current state of the machine and the current job.



Changing settings.
To change or adjust settings; Select an item in the Main screen with the [arrow] button and press the [Enter] button. For example you can fine adjust the trimming, change stapling mode or set the SquareFolder to the correct mode. Settings are explored more thoroughly in section 2. Making Booklets.



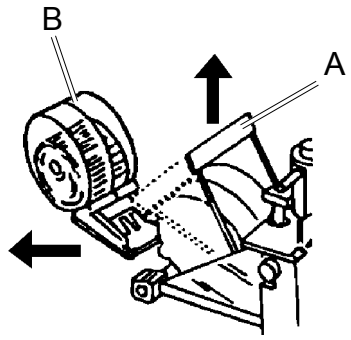
The Admin screen.
Pressing the [Admin] button in the Main screen takes you to the Admin screen. From here you can change the display language, set paper size standard and more. See section 3. Admin, for how to navigate in the Admin screen.



The Jobs screen.
Pressing the [Jobs] button in the Main screen opens the Jobs screen. From here you customize and save job settings. Press [Jobs] again and you can load previously saved jobs. These procedures are described in section 4. Jobs.

Staples, Staple Cartridge, Stapler Head & Clinchers

Removing / replacing Staple Cartridge

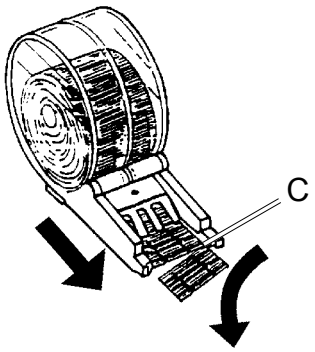


You may remove and replace the staple cartridge while the stapler head assembly is in place.

1 Open the top cover.

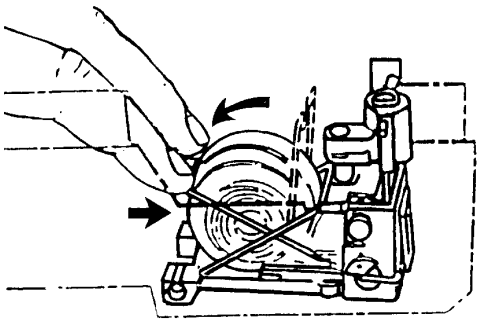
2 Raise the staple cartridge locking lever (A) as indicated in the drawing.

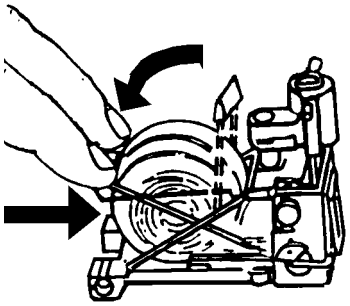
3 Gently twist the staple cartridge (B) from side to side, and pull out the staple cartridge (B) from the stapler head.



4 If the staple cartridge is empty or allmost empty*, discard it and replace it with a new one. Before replacing the cartridge, pull at least 20 mm of the staples out and tear off at the staple tear line (C) which is marked on the cartridge. If there has been a misfeed, and the cartridge still contains staples, pull 20 mm of staples out of the cartridge and tear off at the stapler tear line. Check that the first staple is flat. If not, tear off another 20 mm, using less force.

*containing 300 staples or less





Replacing the staple cartridge

Note

It is important that the cartridge **not** is allowed to move away from the stapler head before the locking lever is in engaged. If that occurs, remove cartridge and again tear off 20 mm of staples along the staple tear line before inserting the cartridge.

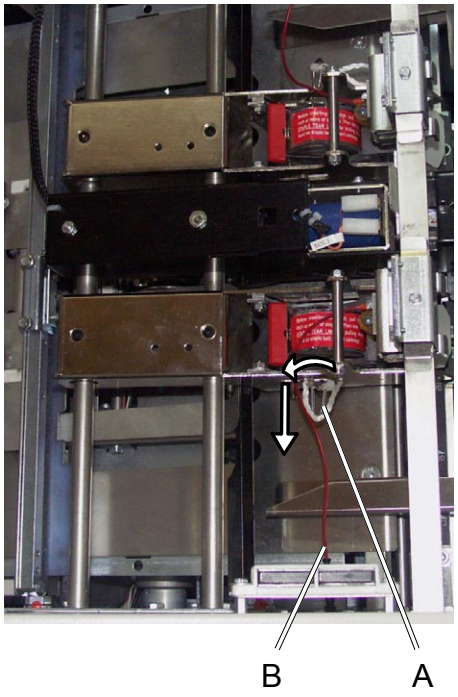
5 Insert the cartridge into the stapler head with the staples facing towards the head mechanism. The cartridge should be placed flat on the slide on the bottom of the stapler head. Push the cartridge firmly into the stapler head and keep holding it pressed. While holding the staple cartridge firmly pressed into the stapler head, push down the cartridge locking lever.

Removing / replacing Staple Cartridge, continued

After staple jam or empty staple cartridge has been detected, the BM 2000 will automatically advance and feed staples. This feature is called staple recovery. Follow procedure below after a staple jam or empty staple cartridge indication.

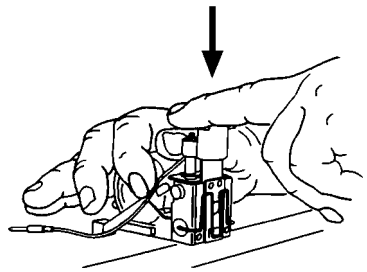
1. Follow step 1-6 on the previous page.
2. Close the top cover.
3. Feed in a four page set. The staple recovery will commence now.
4. Now the BM 2000 has recovered and production can continue. In case problem persists and no staples were fed, the display will indicate that again.
   In such a case:
   Repeat this procedure. If problem still persists, perform the Removing/replacing Stapler Head procedure.

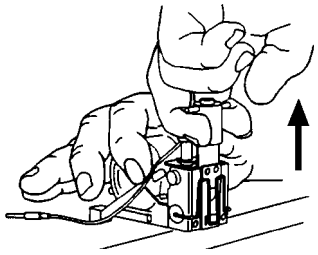
Removing / replacing Stapler Head



1. Select A3 (11x17”) paper size to facilitate removing or replacing the stapler head.
2. From the Main Screen press [Admin]. Select Stapler removal position and press [Enter].
3. Rotate the locking pin (A) towards the folding area and remove the locking pin from the stapler head assembly.
4. Disconnect the staple detection lead (B).
5. Push the stapler head towards the in-feed side, out of the stapler head assembly.

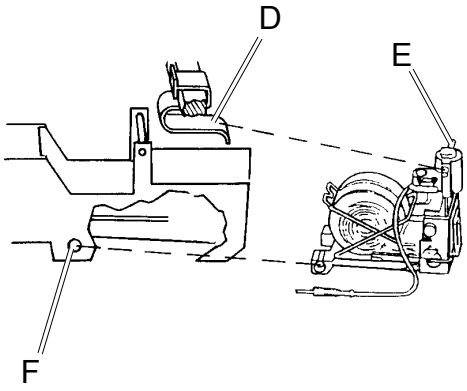
Removing/replacing Stapler Head, continued





Note
Whenever you remove a stapler head, be sure to manually eject some staples before replacing it in the BM 2000. To do this, rest the stapler head on a firm surface (for example, the top of a table) and actuate the staple driver post up/down through full travel. Do this a number of times to ensure that the staples are ejected on each down movement. If you need to change the staple cartridge, see previous section, removal/replacement of staple cartridge.

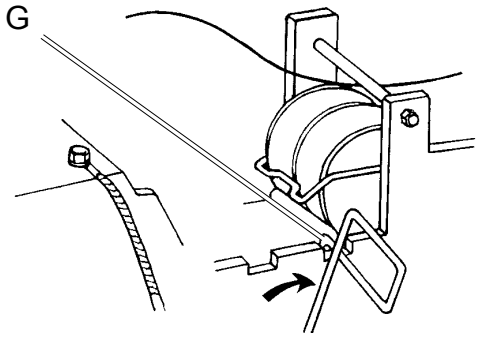
⚠ Warning
When manually ejecting the stapler, stay clear from stapler output area.



6 Before inserting the stapler head, centre the stapler lift bracket (D) over the area that will receive the stapler head. Ensure that the staple driver post (E) is in its uppermost position.

7 Place the stapler head back into the BM 2000. The driver post arm (E) must be placed into the stapler lift bracket (D).

⚠ Caution
If the driver post arm is not correctly positioned into the stapler lift bracket (D) it will cause permanent damage to the stapler head as well as the bracket. Subsequently, also future correctly mounted stapler heads will be damaged.

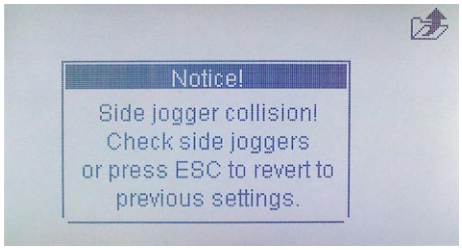


8 Press on the lower front edge of the stapler head to align the hole (F) in the stapler bracket with the hole in the stapler head. Insert the locking pin (B) so that it engages the stapler head and the metal sides of the stapler assembly.

9 Secure the locking pin by rotating it towards the in-feed side until it snaps in position (G). Check that the stapler head is correctly mounted by pushing the stapler head towards the infeed area. If it is still loose, it is not correctly mounted.

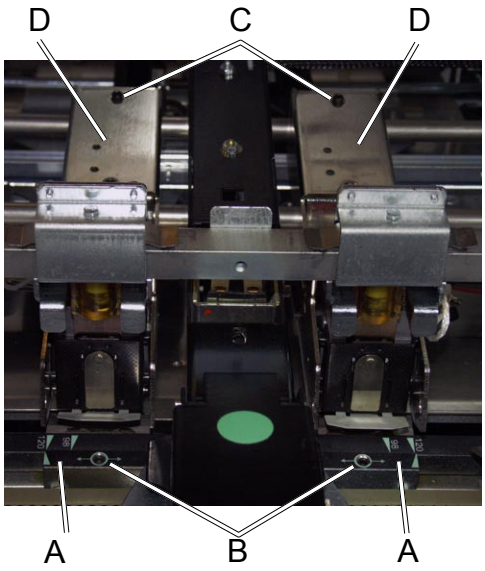
10 Insert the staple detection lead (C) into its socket.

Changing Staple position and Narrow width Paper Sizes

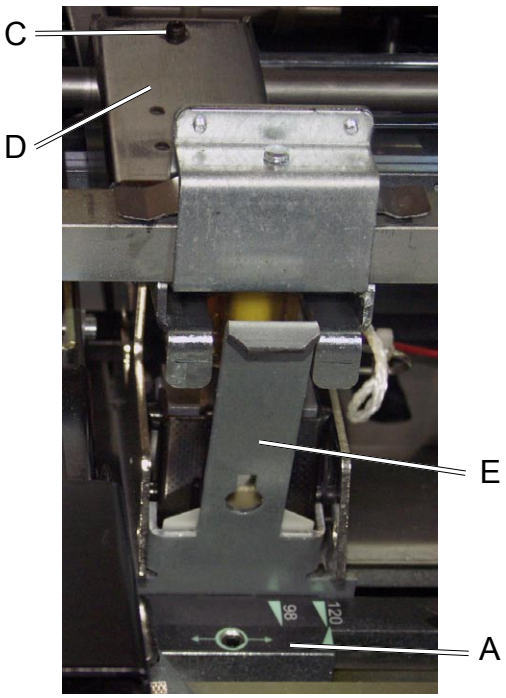


Note
Some situations require that the stapler assemblies are repositioned and/or that the side guide extensions are removed. This to avoid that the side guide extensions collide with the stapler assembly. If such collision should occur, the message “Side jogger collision. Check side joggers. Width setting reseted” will be shown in the control panel.

Changing Stapler and Clincher position

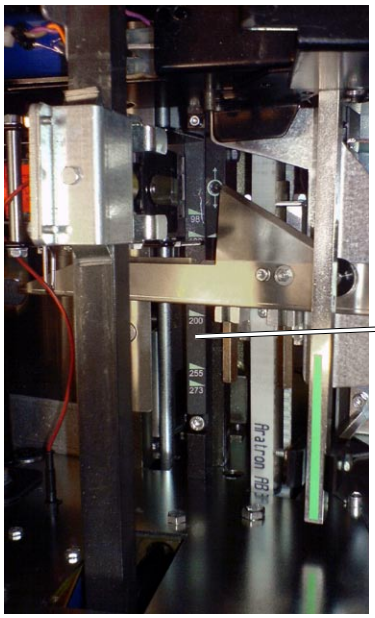


1. Use the allen key in the tool box at position (B) to loosen each anvil (A).
2. Move each anvil (A) to the desired position and tighten the set screws (B) using the allen key.
3. Use the allen key in the tool box at position (C) to loosen each stapler assembly (D).



4. Position each stapler assembly (D) over the corrresponding anvil (A) and use the alignment tool (E) found on the right machine frame to centre each stapler assembly over each anvil (A). Thighten the screws (C).

Caution
It is very important to align the stapler assembly correctly over the anvil.



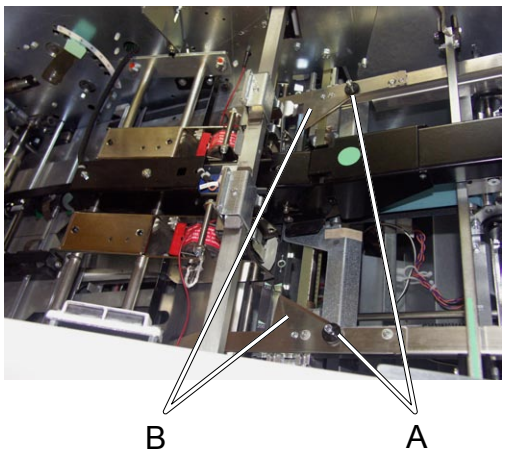
The anvil positioning scale (F) indicates the distance, in millimetres, from centre to centre (cc) of the staples.

Type of finishing	Paper format	Setting (cc)
booklet making	5.5”, CD	98
booklet making	A5	98
booklet making	8.5”, A4	120 (default position)
booklet making	11”, A3	120 or 200
edge stapling	11”, A4	144 (recommended)
corner stapling	11”	255 (recommended)
corner stapling	A4	273 (recommended)

Note
Using other settings could result in poor staple/fold result.

5 If required, also remove the side guide extensions. See “Setting up narrow width paper sizes below.

Setting up narrow width paper sizes



If you are setting up a paper width less than 210 mm (8.27”) and the stapler assemblies are in the default position, the side guide extensions (B) must be removed.

1 Loosen thumb screws (A), one on each side guide.

2 Remove both side guide extensions (B).

3 If required, also move the Stapler and Clincher positions closer together. See “Changing Stapler and Clincher position” above.

Note
Make sure to re-install the side guide extensions after the run. Otherwise paper jams might occur.

Trimmer

Emptying the Trim Bin

1 Remove the trim bin by pulling handle (1).

2 Lift out the Trim Bin by grasping the rod (2) and handle (1).

2. Making Booklets

Changing Settings

General Procedure

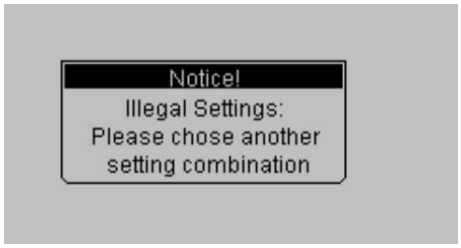
Changing settings can be performed in two ways. Temporary, which means that the changes will remain until a new job is loaded or permanent, which means that the changes will be stored as a job. This job can later be recalled.

Procedure for temporary changes:
From the Main screen, select the option you wish to change and press the [Enter] button. Confirm changes by pressing the [Enter] button in the next screen.

Procedure for permanent changes:
Same procedure as for temporary changes. But, in addition, from the Main screen, press the [Jobs] button to reach the Jobs screen. Select Save if you want to incorporate the change in the current job or Save as... if you want to store the changed job as a new job.

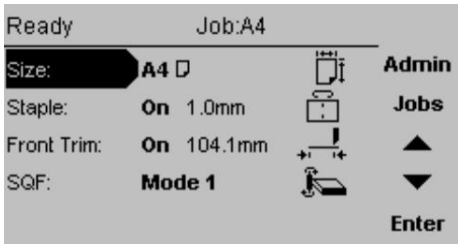
Note
Choose either of the above mentioned procedures when changing size, stapling, trimming or Square folding as follows.

Setting Paper Size

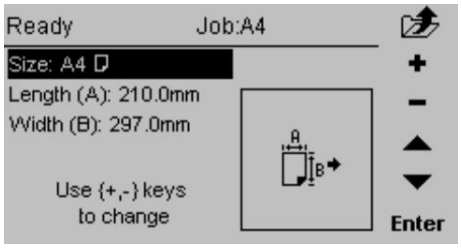


Note
Some combinations of paper size and staple mode are not possible. If the message “Illegal settings. Please choose another setting combination” is shown, correct either paper size or stapling mode.

Selecting Standard Paper Sizes

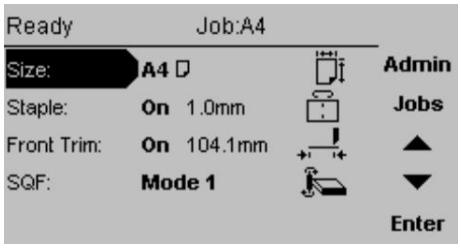


From the Main screen, select [Size] and press the [Enter] button.

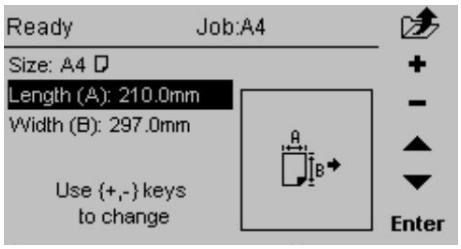


Current Size is highlighted. Press [+] or [-] to scroll within the preset paper sizes. Press [Enter] to select.

Custom Paper Size



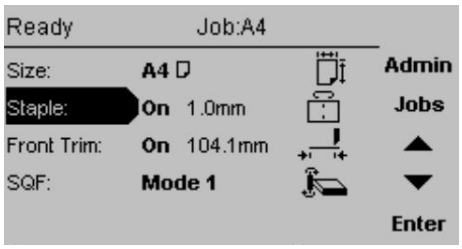
From the Main screen, select [Size] and press the [Enter] button.



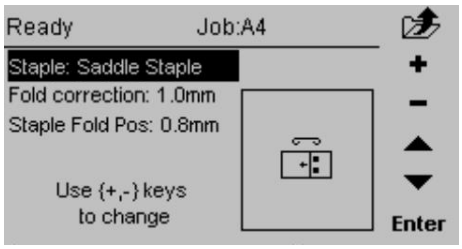
Select [Length] or [Width] and press the [+] or [-] button to correct paper size. The paper size can be changed in increments of 0.1 mm or approx.. 0.01 inches. Press the [Enter] button to confirm.

Note
In the main screen the paper size is shown without the decimal point. The machine has however recognised and set up according to the exact size including the decimal point.

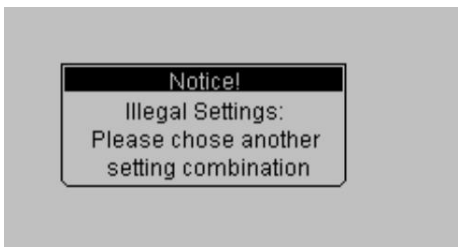
Stapling and Folding



From the Main screen, select [Staple] and press the [Enter] button.

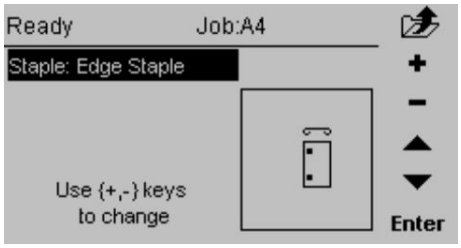


There are four different stapling modes; [Off], [Edge staple], [Saddle staple] and [Corner staple]. With the Staple line highlighted, press [+] or [-] to choose stapling option.



Note
Some combinations of paper size and staple mode are not possible. If the message “Illegal settings. Please choose another setting combination” is shown, correct either paper size or stapling mode.

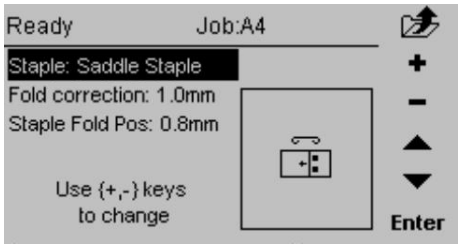
Edge staple



Select [Edge staple] when you want to make edge stapled sets. Press the [Enter] button to confirm.

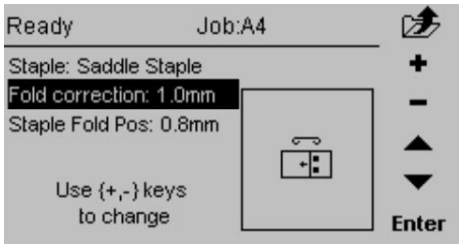
Note
Finished sets will be delivered to the Trim Bin in the Trimmer.

Saddle staple



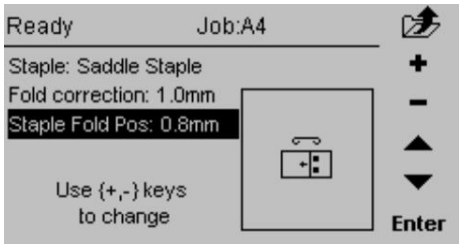
Select [Saddle staple] when you want make saddle stapled booklets.
Staple position and fold line can be adjusted both individually and together. If adjustment is needed, see Staple and Fold Alignment below. Otherwise, press the [Enter] button to confirm.

Staple and Fold Alignment



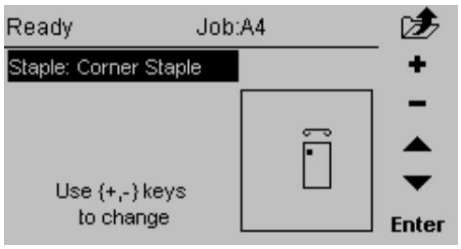
If the booklets exiting the system do not have the staples centred on the fold, or if stapling position is desired on the top or bottom of the spine, that can be adjusted from the control panel.
With Fold correction highlighted, press [+] or [-] to move staple positioning on the spine. Press the [Enter] button to confirm.

Note
This adjustment can also be done during booklet making.



If the booklet fold line is not in the centre of the sheet, or if it is desirable to move the fold line to match the print, that can be adjusted from the control panel. Contrary to the above situation, this adjustment moves both the staple and fold together.
With Staple Fold Pos highlighted, press [+] or [-] to move the staple and fold line position. Press the [Enter] button to confirm.

Corner staple



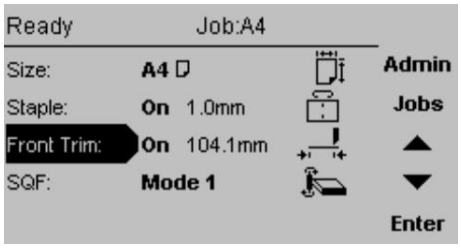
1 Select [Corner staple] when you want to make corner stapled sets. Press the [Enter] button to confirm.

2 Remove either stapler head and position the other stapler head and clincher as needed. See section 1. Basics.

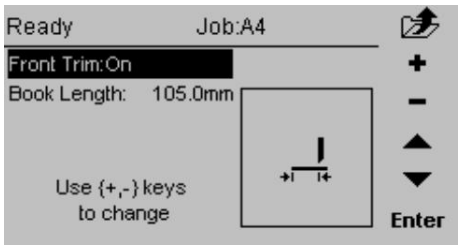
Note
Finished sets will be delivered to the Trim Bin in the Trimmer.

Trimming

Selecting Trimming On or Off

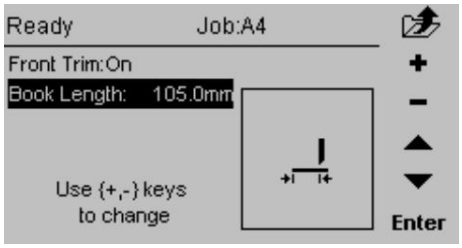


From the Main screen, select Front Trim and press the [Enter] button.



Press the [+] or [-] button to change Front Trim on or off. If the cutting margin i.e. the length of the booklet needs to be adjusted, see Adjusting the Cutting Margin below. Otherwise, press the [Enter] button to confirm.

Adjusting the Cutting Margin



With [Book length] highlighted, press [+] or [-] adjust the cutting margin. The measurement displayed is the width of the finished, trimmed booklet. Press the [Enter] button.

Note
Even though it is possible to set a certain cutting margin in the control panel, the Trimmer has mechanical limits. The minimum length of a trimmed booklet is 120 mm (4 3/4”) and the maximum length is 220 mm (8 11/16”).

SquareFolding

General

The SquareFolder has seven different settings; [Off], [Mode 1], [Mode 2], [Mode 3] [Mode 4], [Mode 5] or [Auto].

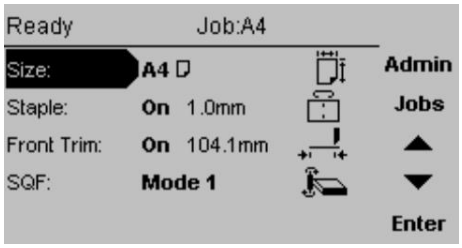
In [Auto] mode, the Booklet Maker detects how many sheets there are in the booklet, and automatically set the SquareFold to the correct mode.

Note
When the SquareFold is set to [Auto] and the booklet has less than approximately 6 sheets/ booklet, the SquareFold will bypass the Square folding action, transporting the booklet out to the Belt stacker.
Use the manual modes to override the auto function. There are five different manual modes to select from.

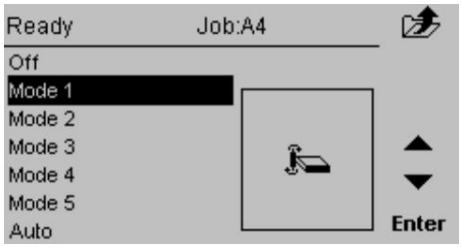
Mode 1: Approximately 6 - 10 sheets.
Mode 2: Approximately 11 - 15 sheets.
Mode 3: Approximately 16 - 20 sheets.
Mode 4: Approximately 21 - 25 sheets.
Mode 5: Approximately 26 - sheets.

Select [Off] to bypass the SquareFold

Procedure



From the Main screen, scroll down to SQF and press the [Enter] button.



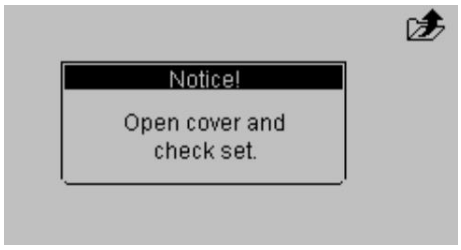
Select [Auto], [Mode 1], [Mode 2], [Mode 3] or [Off] with the [arrow] button and press the [Enter] button.

On-line / Off-line

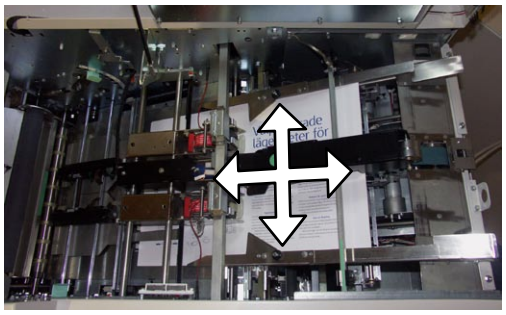
The Booklet Maker can be operated in two modes. On-line mode, when used together with the Feeder/Collator, or off line mode, when used for hand feeding.

On-line Mode

1. Make necessary settings according to “Changing settings” earlier in this section.
2. The Booklet Maker is now in stand-by and will start automatically when a set is fed from the Feeder/Collator.
3. Setup the Feeder/Collator according to the Feeder/Collator operating instruction
4. Press the yellow button (A) on the Feeder/ Collator to send a calibration set from the Feeder/ Collator to the Booklet Maker.



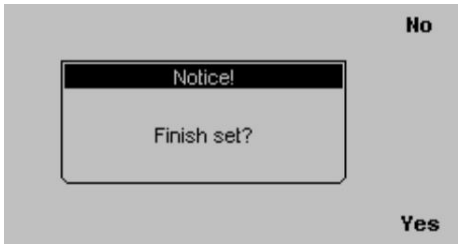
The message “Open cover and check set!” will be shown in the Booklet Maker control panel.



5. Open the Booklet Maker top cover and check the set regarding number of sheets and paper size. Try to move the sheet/set as illustrated to detect play. If there is play, adjust the paper size setting in the Booklet Maker accordingly. Send a calibration set again and check that there is no play.

Continue on next page

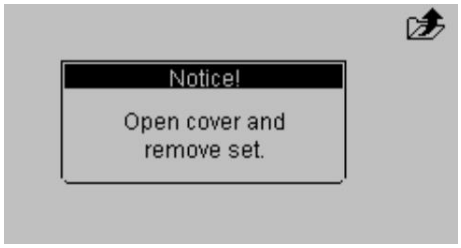
On-line Mode, continues



6 Close the Booklet Maker top cover. The message “Finish set?” will be shown in the control panel.

7 There are now two choices:

- Press the “Yes” button on the Booklet Maker. The set will be finished and fed to the belt stacker.
  or
- Press the “No” button on the Booklet Maker. The message “Open cover and remove set” will be shown in the Booklet Maker control panel. Open the Booklet Maker top cover and remove the set. Close the top cover.



8 Press the green button (B) on the Feeder/Collator to start making booklets.

Note

In either step, 4 or 6 above, instead of following the calibration procedure you can:

- Press the “Purge” button on the Feeder/Collator. The set will be finished and fed to the belt stacker.
  and/or
- Press the green button (B) on the Feeder/Collator to directly start making booklets.

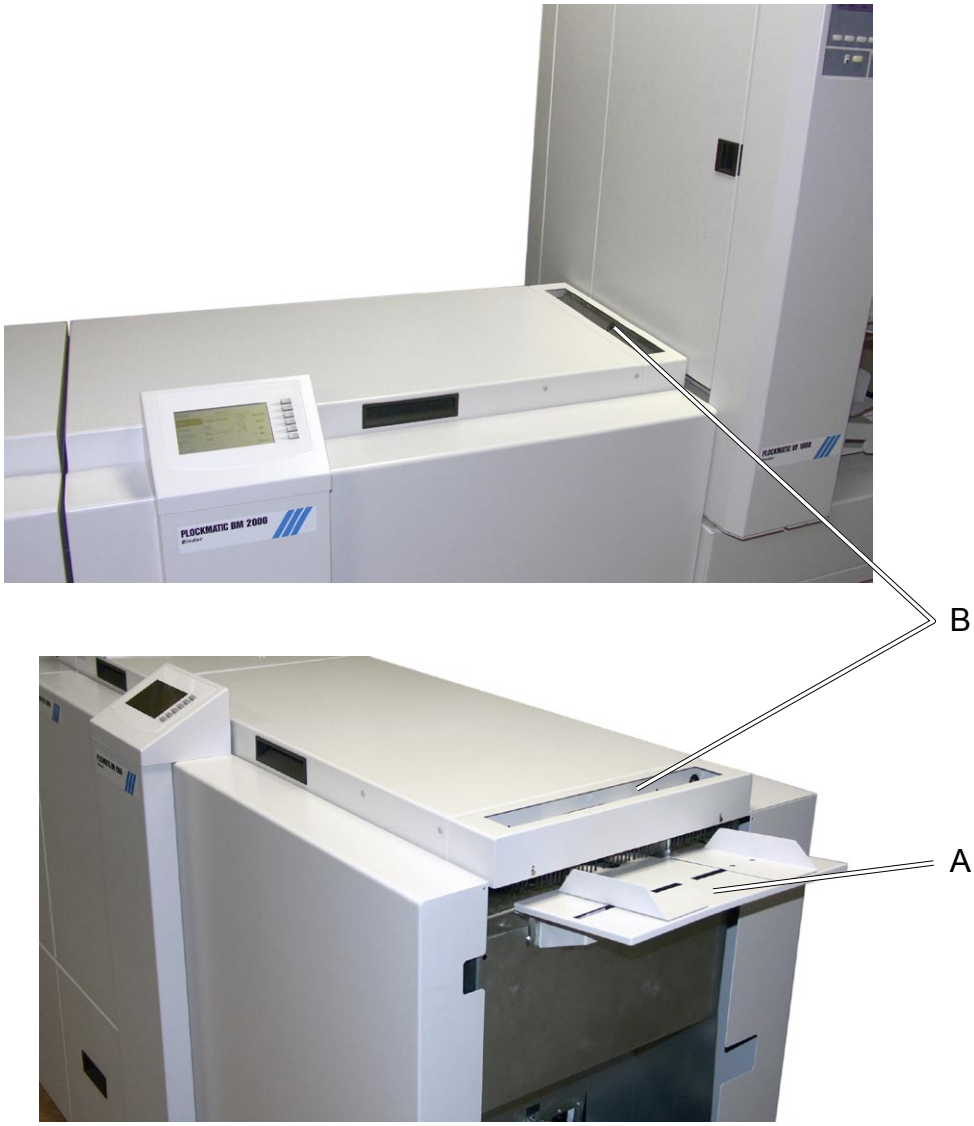
Off-line Mode

1 Make sure Booklet Maker is in stand-by mode, i.e. that a job is not in progress.

2 Make necessary settings according to “Changing settings” earlier in this section.

3 The Booklet Maker is now in stand-by mode and will start automatically when a set is manually fed into the Booklet Maker.
Sets can be fed either to the optional hand feed tray (A) or to the hand feed slot (B) in the top cover.

Note
The Booklet Maker can be hand fed while it is still docked to a Collator/Feeder. The Collator/Feeder can be used for internal stacking at the same time as the Booklet Maker is used for hand feeding.



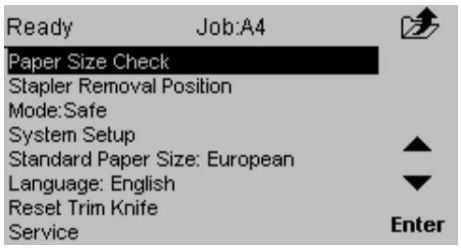
3. Admin

The Admin Screen

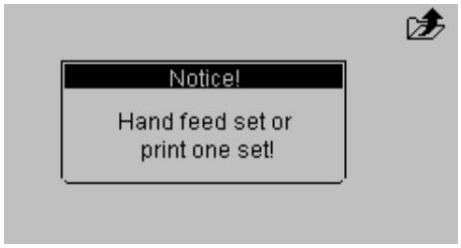
From the Main screen, press the [Admin] button to get to the Admin screen. Here you will find additional features and settings.

Paper size check

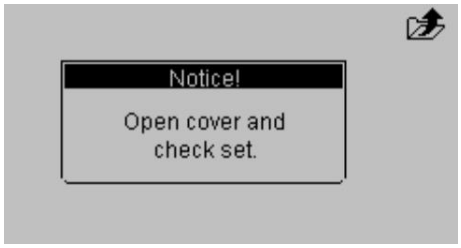
Use [Paper size check] to verify that the Booklet Maker paper size setup corresponds to the actual hand fed sheets. If sheets/sets instead are fed from a Feeder/Collator, this control can be made after a calibration set has been sent from the Feeder/Collator, see On-line mode under section 2.



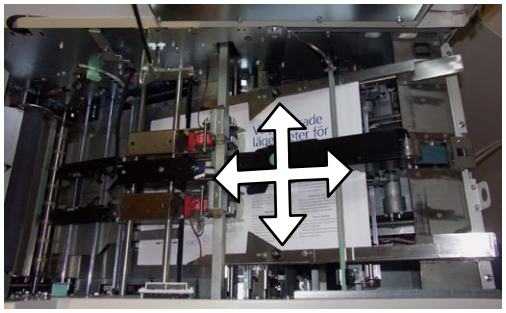
1 Select [Paper Size Check] and press the [Enter] button.



2 The Message “Hand feed set or print one set!” is displayed. Hand feed a set to the Booklet Maker.



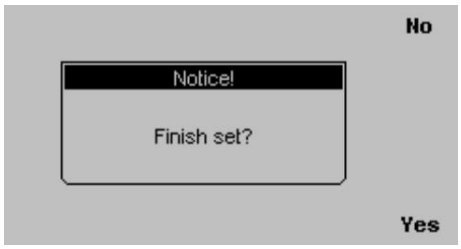
3 The message “Open cover and check set!” will be shown in the Booklet Maker control panel. Open the Booklet Maker top cover.



4 Try to move the sheet/set as illustrated to detect play. If there is play, adjust the paper size setting in the Booklet Maker accordingly. Perform Paper size check again and verify that there is no play.

Continue on next page

Paper size check, continues

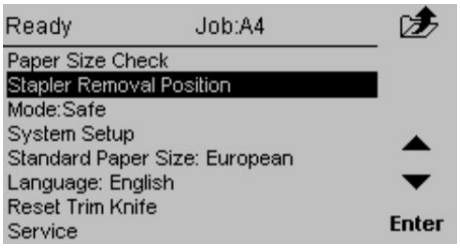


5 Close the Booklet Maker top cover. The message “Finish set?” will be displayed.

There are now two choices:

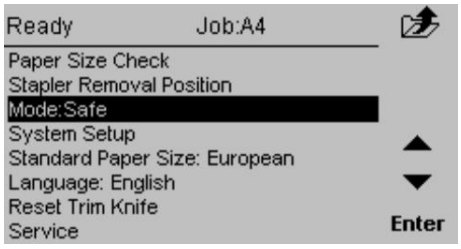
- Press the [Yes] button on the Booklet Maker. The set will be finished and fed to the belt stacker.
  or
- Press the [No] button on the Booklet Maker. The message “Open cover and remove set” will be shown in the Booklet Maker control panel. Open the Booklet Maker top cover and remove the set. Close the top cover.

Stapler removal position

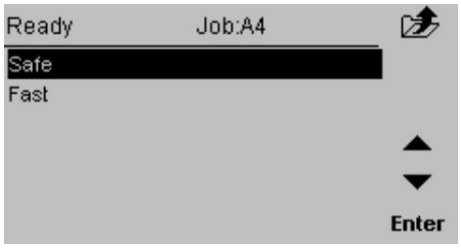


From this screen you can change the position of the stapler drive bar. This will facilitate the removal and inserting of the staple cartridge.
Select [Stapler removal position] and press the [Enter] button.

Mode, Safe / Fast



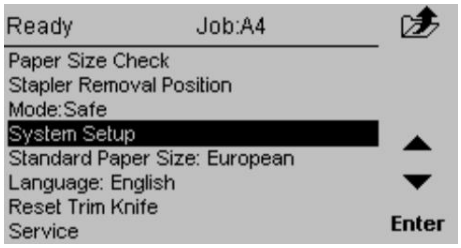
The Booklet Maker can be set in two different modes, Safe or Fast. The Safe mode is optimized for highest booklet quality and the Fast mode is optimized for highest speed. Select [Mode] and press the [Enter] button.



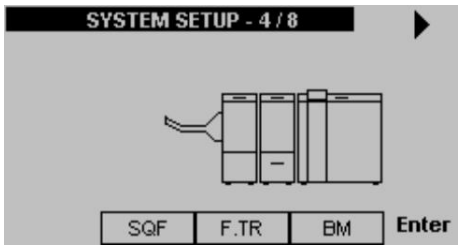
Select desired mode and press the [Enter] button.

Note
If the Feeder/Collator is set to collating and trimming is set to on, Fast mode will not increase speed. Instead select Safe mode to ensure highest booklet quality.

System Setup

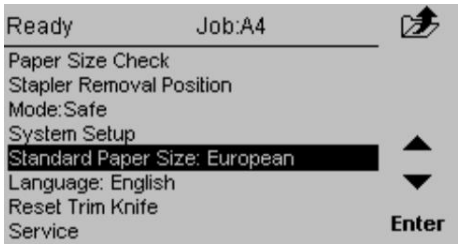


[System Setup] allows you to change how the booklet making system setup will appear in the control panel. Select System Setup and press the [Enter] button.

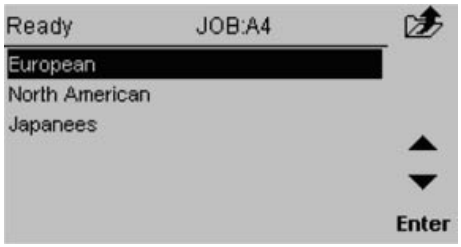


Scroll to the right system configuration and press the [Enter] button.

Standard Paper Size

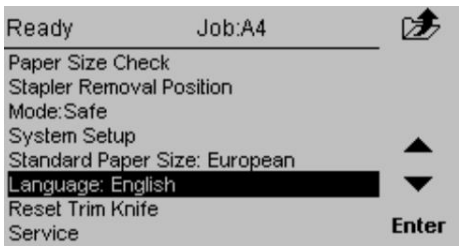


By changing the paper size standard, the preset paper sizes are altered to best fit your regional standard. Also, the units will change between millimetres and inches accordingly. Select [Standard Paper Size] and press the [Enter] button.

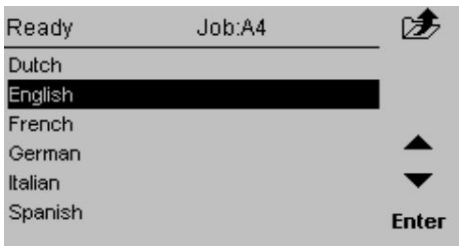


Select the desired standard and then press the [Enter] button.

Language

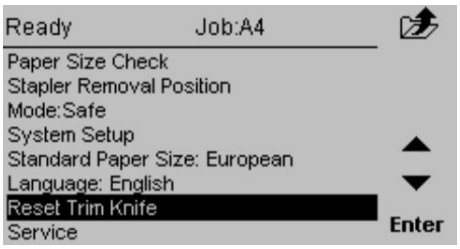


From this screen you can change the language in the user interface. Select [Language] and press the [Enter] button.



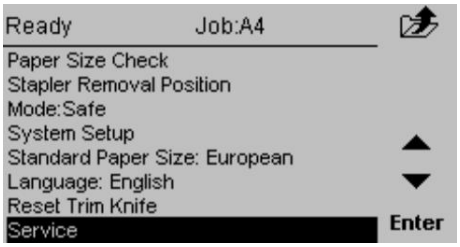
Select desired language with the [arrow] buttons and press the [Enter] button.

Reset Trim Knife



From this screen you can reset the position of the trimknife. This is useful when the knife is stuck in the active/down position. You will get fault codes TR 201-202 or BM 210-211.
Select [Reset trim knife] and press the [Enter] button.

Service



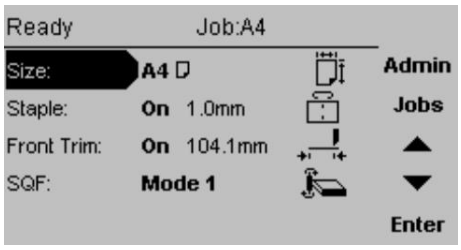
This screen to access service is for authorized service personnel only and is password protected.

4. Jobs

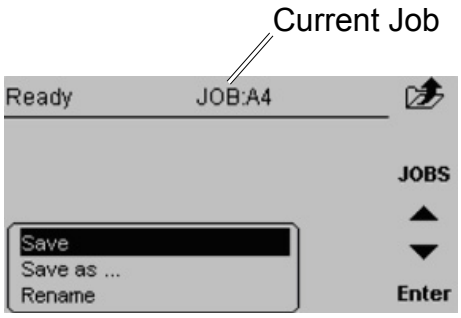
Storing and Deleting Jobs

The Booklet Maker has a maximum storage capacity of 10 different jobs. Also see section 2 Making Booklets.

Storing a Job

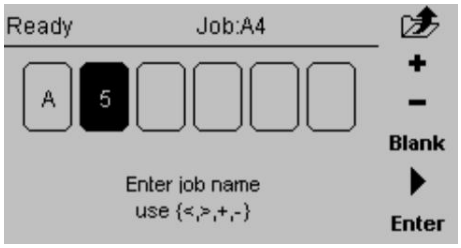


Change all settings according to section 2 for a particular job.
Now the changes are just temporary. You can run the system with these changes but as soon as you change something again the previous settings will be lost.
To store the settings, press [Jobs] from the Main screen.



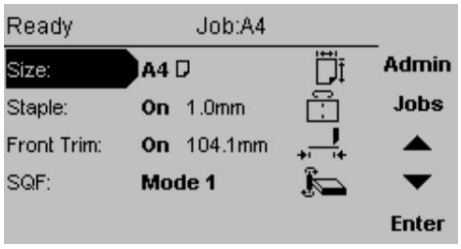
Now you have three choices:

- Choosing [Save] will overwrite the current Job. The Current Job name is displayed on top of the screen.
- Choosing [Save as...] gives you the option to save it as a new job or overwriting another job.
- Choosing [Rename] will overwrite the Current Job (if changes were made). This is the same as the Save option, but now you have the possibility to enter or change the name for the current job.

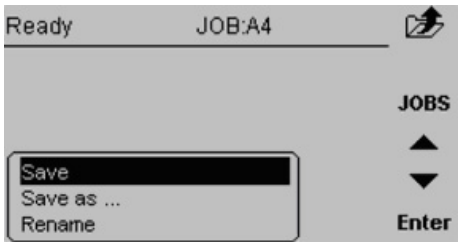


This screen is displayed if Rename is Entered from the Jobs screen.
Press [+] or [-] to change highlighted character. Press [Blank] for no character. Move the cursor by pressing the [Arrow]. Press [Enter] when done.

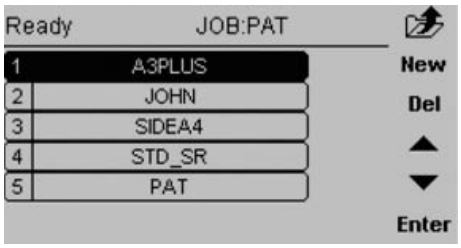
Recalling a Job



To recall a stored job press the [Jobs] button from the Main screen.



Then press the [Jobs] button from the Jobs screen.

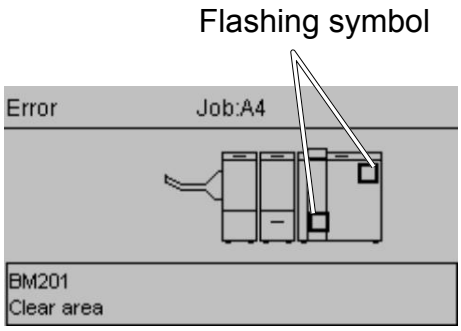


Select one of the previously stored jobs from the list. Press the [Enter] button to recall the job. This Job is now uploaded and becomes the current job.

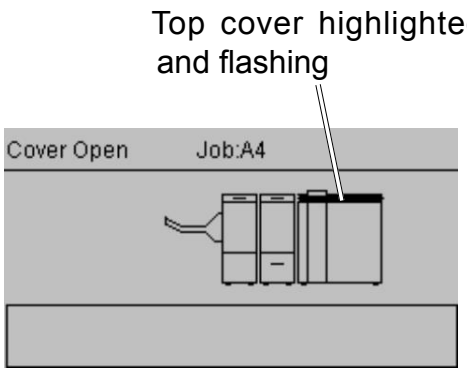
Clearing a Paper Jam

General

If an error such as a paper jam condition should occur, it is indicated in the control panel on the Booklet Maker. The nature of the fault is generally displayed in clear text at the top. In the centre of the display the diagram shows in which module and where the error has occurred. At the bottom of the display an error code is displayed and a text explaining the error. See examples below.



Jams in the Booklet Maker are indicated by a square shaped flashing symbols in the control panel.



If one of the top covers is open, the symbol on the control panel shows the top cover flashing.

Booklet Maker

Clearing a Paper Jam

Inside the Booklet Maker

To clear a paper jam in the infeed or staple area

1. Open the top cover.
2. Remove jammed sheets.
3. Close the top cover.

To clear a jam indicated in the folding area

1. Open the top cover.
2. Close top cover.

If the jam still remains:

1. Switch off the Power.
2. Switch on the Power.

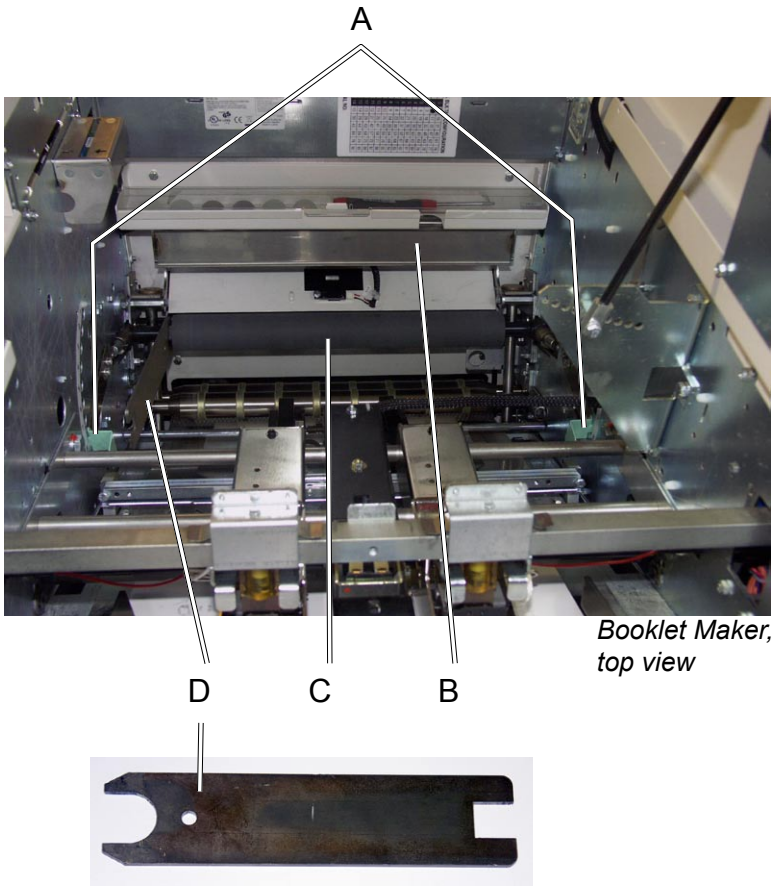
Continue on next page

Folding area *Stapling area*

Inside the Booklet Maker, continues

If the jam still remains:

1. Switch off the Power
2. Set the fold adjust levers (A) on both sides to “8” to separate the fold rollers.
3. Lift up the guide (B) from below the upper fold roller (C).
4. Use the key (D) from the tool box and crank the upper fold roller to remove jammed sheets.
5. If a Trimmer is installed, removing the Trim Bin gives you access to the fold stop area from the outfeed side of the Booklet Maker.
6. Put the key back in the tool box.
7. Replace the Trim Bin, if the Trim Bin was removed.
8. Switch on the power.



Booklet Maker, top view

Trimmer

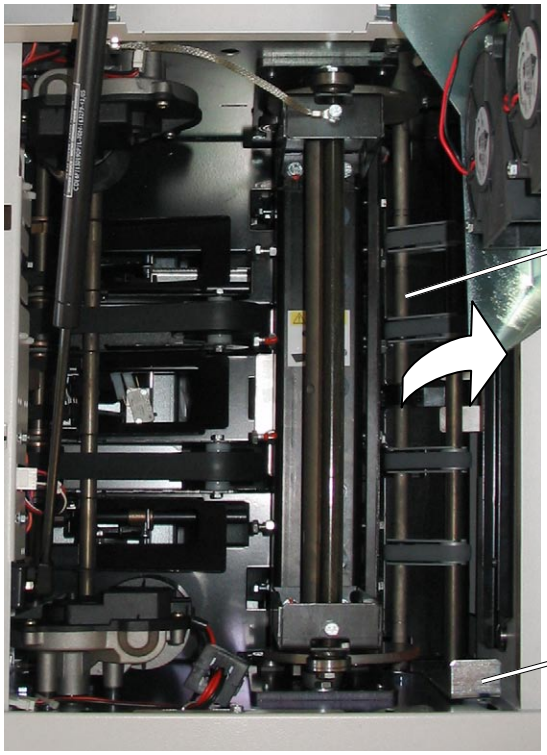
Clearing a Paper Jam

The upper trimmer blade on the trimmer is protected by a knife protection plate that moves away during the cutting stroke. Jams can occur in the input area or the exit area.

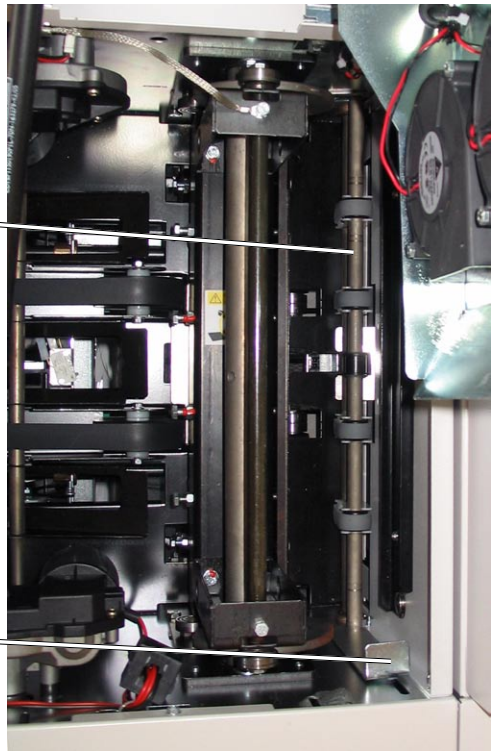
⚠ **WARNING:**
Never put fingers or other parts of the body between the upper and lower trimmer knives.

Clearing Jam in Input Area

1. Lift up the infeed roller shaft (A).
2. Secure under latch (B)
3. Remove the jammed sheets in the infeed area.
4. After the jammed sheets are removed, lift up the latch (B) and place the infeed roller shaft in the operating position.



Infeed roller shaft, operating position

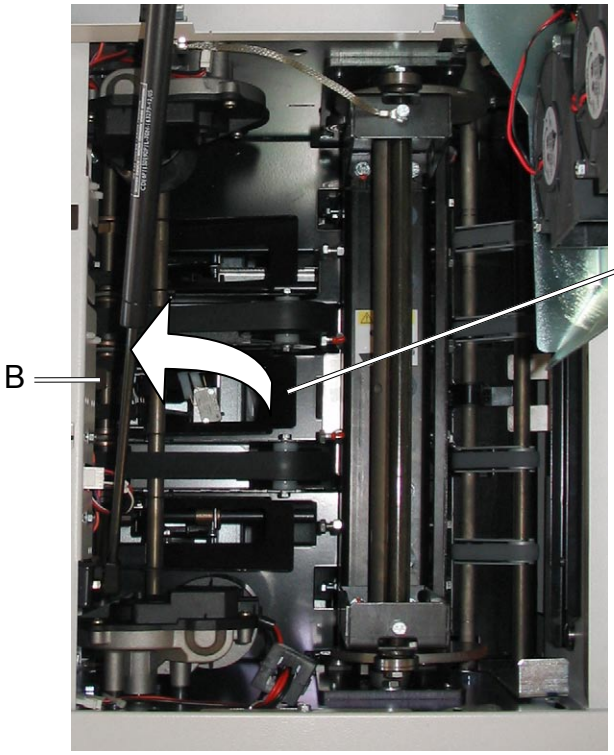


Infeed roller shaft, lifted position

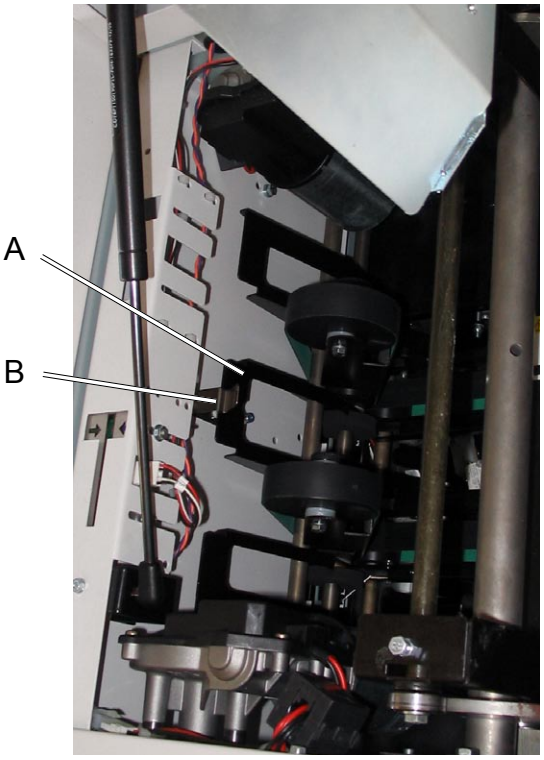
Clearing a Paper Jam, continued

Clearing Jam in Exit Area

1. Lift the exit compression brackets (A).
2. Secure them under the latch (B).
3. Remove the jammed sheets from the exit area.
4. After the jammed sheets are removed, lift up the latch (B) and place the compression brackets in the operating position.



Compression brackets, operating position

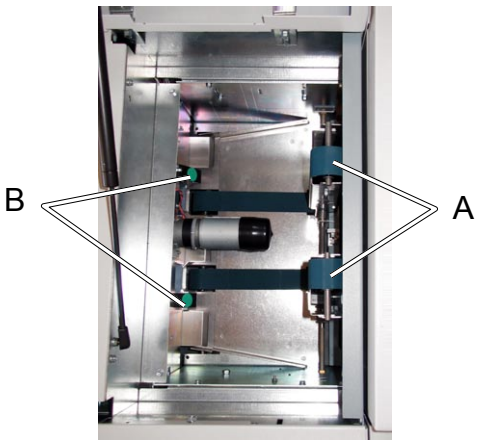


Compression brackets, lifted position

SquareFolder

Clearing a Paper Jam

Inside the SquareFolder



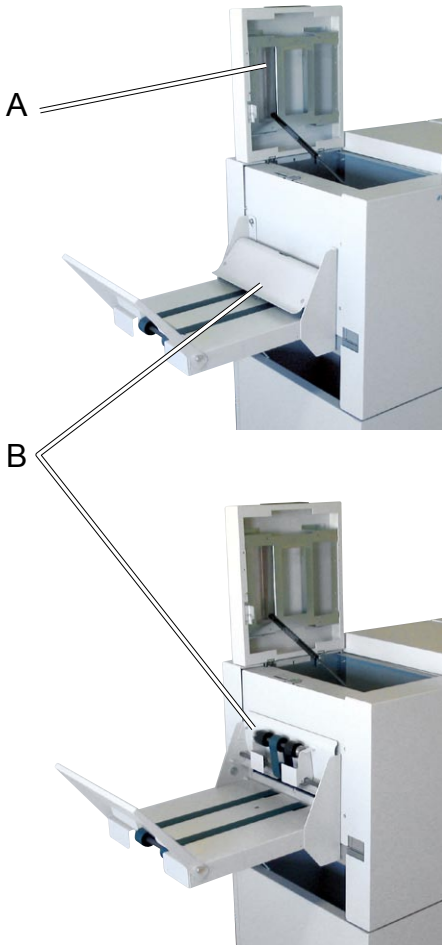
1. Open the top cover.
2. Lift up both upper feed belts (A).

Note

Press the green-labelled latches (B) to release.

3. Remove the jams.
4. Place the upper feed belts in normal position.
5. Close the top cover.

Exit Area



1. Open the top cover (A).
2. Lift up the Belt Stacker Cover (B).
3. Remove the jam.
4. Place the Belt Stacker Cover in normal position.
5. Close the top cover.

6. Troubleshooting

Fault codes

General

When there is a jam or fault condition in the Booklet Maker system, a fault code and a short description will be displayed in the control panel on the Booklet Maker.
Some faults can be rectified by the operator and some faults only by an authorized technician.

Fault codes that generally can be rectified by the operator:

Booklet Maker	BM-201 to BM-211	indicates “Clear area”
	BM-212	Indicates “Remove Stacked Sheets”
	BM-213	Indicates “Too Many Sheets”
	BM-401	indicates “Check Staples”
Trimmer	TR-201 to TR-204	indicates “Clear area”
	TR-205	indicates “Close trimmer belts”
	TR-501	indicates “Waste bin full”
SquareFolder	SQF-201 to SQF-206	indicates “Clear area”

How to clear a paper jam when the message “Clear area” is shown is described in section 5. Actions to solve the remaining fault codes are described on the next page.

Note
If procedures specifically described in this manual do not rectify the problem:

- Open covers and verify that everything appears to be in a normal state. Close covers.
- Switch off the power and wait 10 seconds before power is switched on again.
- Call for an authorized technician.

Booklet Maker Fault Codes

Remove stacked sheets

This message will be displayed if there is a miss-feed or double-feed in the Feeder/Collator when the set is delivered to the Booklet Maker.
Either:

- Open the top cover, remove the set and close the top cover.
  or
- Press the “Purge” button on the Feeder/Collator. The set will be fed to the belt stacker.
  and/or
- Press the green button on the Feeder/Collator to directly start making booklets.

Too many sheets

This message will be displayed when the set fed to the Booklet Maker is outside specifications. Open the top cover, remove the set and close the top cover.

Check Staples

This message will be displayed when a staple cartridge is empty or when stapling could not be performed. Check in the following order:

1. If a staple cartridge is empty, replace according to section 1 Basics.
2. If staple cartridges are OK; remove the set and check that the number of sheets is within specifications.
3. If staple cartridges are OK and the set is within specification, remove and check stapler head according to section 1 Basics.

Trimmer Fault Codes

Close trimmer belts

This message will be displayed when either of the trimmer belt is in the lifted position. Make sure that both the infeed roller shaft and the exit compressing brackets are in the operating position, see section 5, Trimmer, Clearing a Paper Jam.

Waste Bin Full

This message will be displayed when the trim bin is full or when a trim strip is prevented from falling down into the trim bin. Empty the trim bin and remove loose trim strips from inside the Trimmer. See section 1 Basics for how to remove the trim bin.

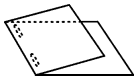
Booklet quality

- If booklet quality is inconsistent, first make sure the actual paper size is matching the paper size set on the control panel. Perform a Paper size check, see section 3.
- If booklet quality is consistently poor such as staples not aligned with the fold or staple and fold line do not match the print, see Staple and Fold Alignment under section 2.
- If the folding action is poor of if the cover of the booklet tends to be torn from the set, see Fold Quality below.
- If feed errors occur or if the booklets are not square folded properly, especially regarding heavier booklets, see SquareFolding Quality below.

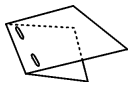
Fold Quality

If the adjustments from the control panel result in inconsistencies or inaccuracies it could be due to paper quality and/or set size. For those cases it is possible to change the ball configuration in the ball cages in the pre-fold transport. The purpose is to apply adequate pressure on the set to ensure proper alignment against the fold stop before the set is folded. The default configuration for BM 2000 is with glass balls closest to the outfeed and plastic balls closest to the infeed. Additional replacement steel, glass and plastic balls are located in the tool box above the fold section.

Example:

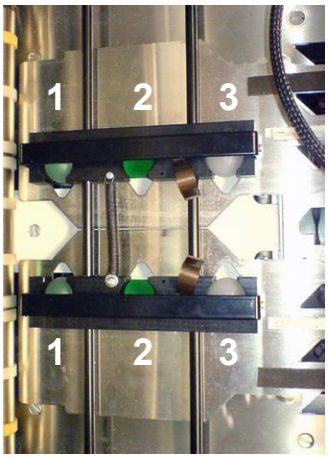


- If booklets comes out with the staples on the back of the booklet, the configuration is to heavy. The set was allowed to buckle (travel) to far before it was folded.



- If booklets comes out with the staples on the front of the booklet and/or if the fold is skew, the configuration is to light. The set did not travel all the way down to the fold stop and was not aligned correctly before it was folded.

See table below for ball configuration guidelines.

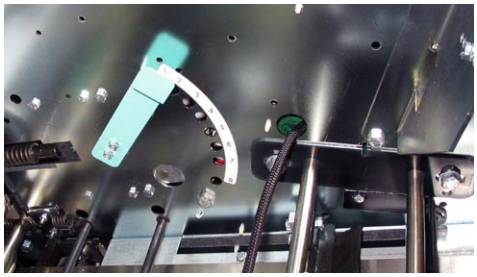


Ball configuration guidelines	1	2	3
Single large sheets, in fold only mode, with low paper weight/stiffness	Plastic	-	-
Small quantity of sheets, with low paper weight/stiffness	Plastic	-	Plastic
Default configuration	**Glass**	**-**	**Plastic**
Large quantity of sheets	Glass	-	Glass
Large quantity of sheets, with higher paper weight/stiffness	Steel	-	Glass
If markings occur on the centre fold when running larger quantities of sheets	Glass	Plastic	Plastic

Note

The table above is meant purely to be a guide. Other configurations might work better depending on the characteristics of the paper quality in conjunction with the set size.

Fold Quality, continues



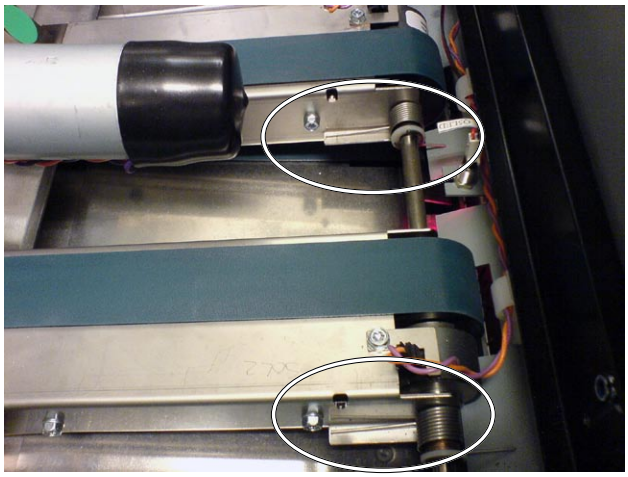
Under extreme circumstances, when the cover sheet tends to be torn from the rest of the set, this can be rectified by adjusting the Fold Adjust Levers located above the pre-fold transport. There are eight positions for each lever. The topmost notch is the default position. Move the lever notch by notch until performance is satisfactory.

SquareFolding Quality

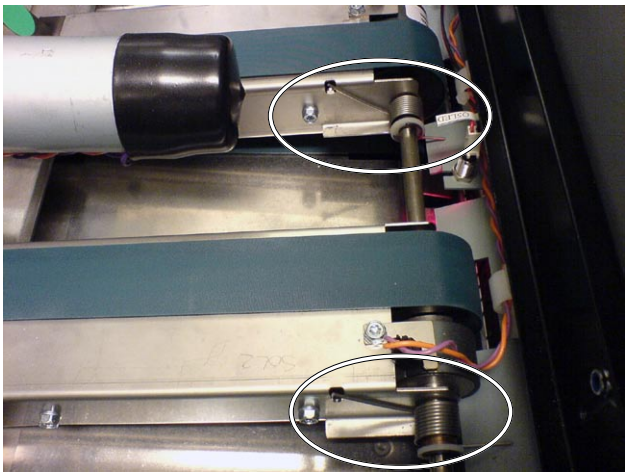
If feed errors occur or if the booklets are not square folded properly, especially regarding heavier booklets, follow this procedure:

1. Make sure that the clamps and feed belts are clean. See cleaning instructions under section 7.

2. Place both springs in the upper position.



Springs in normal position.



Springs in upper position.

7. General Remarks

Do’s And Don’ts

- Always follow all warnings marked on, or supplied with, the equipment.
- Always exercise care in moving or relocating the equipment.

⚠ **Caution**
Unplug the power cord from the wall outlet and machine before you move or relocate the equipment.

- Do not remove the covers or guards that are fastened with screws.
- Do not override or bypass electrical or mechanical interlock devices.
- Do not operate the equipment if you notice unusual noises or odours. Disconnect the power cord from the power source and call your authorized technician to correct the problem.

⚠ **Warning**
This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Note
The domestic environment is an environment where the use of broadcast radio and television receivers may be expected within a distance of 10 m of the apparatus concerned.

- Do not put fingers or other parts of the body between the upper and lower trimmer knives.
- Do not switch off the power while the machine is running. Make sure the machine cycle has ended.
- Do not open covers while the machine is running.
- Do not move machine while the machine is running.
- Do not make arbitrary changes to the machine

Placing Your Machine

Machine Environment

- Always locate the equipment on a solid support surface with adequate strength for the weight of the machine.
- Always keep magnets and all devices with strong magnetic fields away from the machine.

If the place of installation is air-conditioned or heated, do not place the machine where it will be:

- Subjected to sudden temperature changes.
- Directly exposed to cool air from an air-conditioner.
- Directly exposed to heat from a heater.

Power Connection

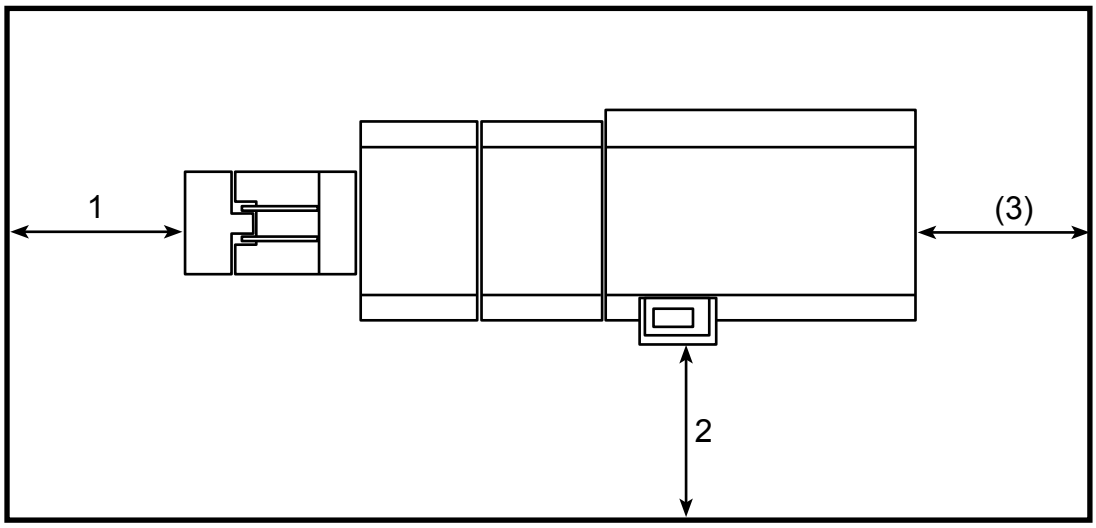
- **Always** connect the equipment to a properly grounded power source. If in doubt, have the power source checked by a qualified electrician.

⚠ **Warning**
Improper grounding of the equipment can result in electrical shock.

- **Never** connect the machine to a power source that lacks a ground connection terminal.

Access to Machine

Place the machine near the power source, providing clearance as shown.



1. Left: more than 400 mm / 15 3/4”
2. Front: more than 555 mm / 21 7/8”

(3). Right: more than 400 mm / 15 3/4” (for stand alone installation only)

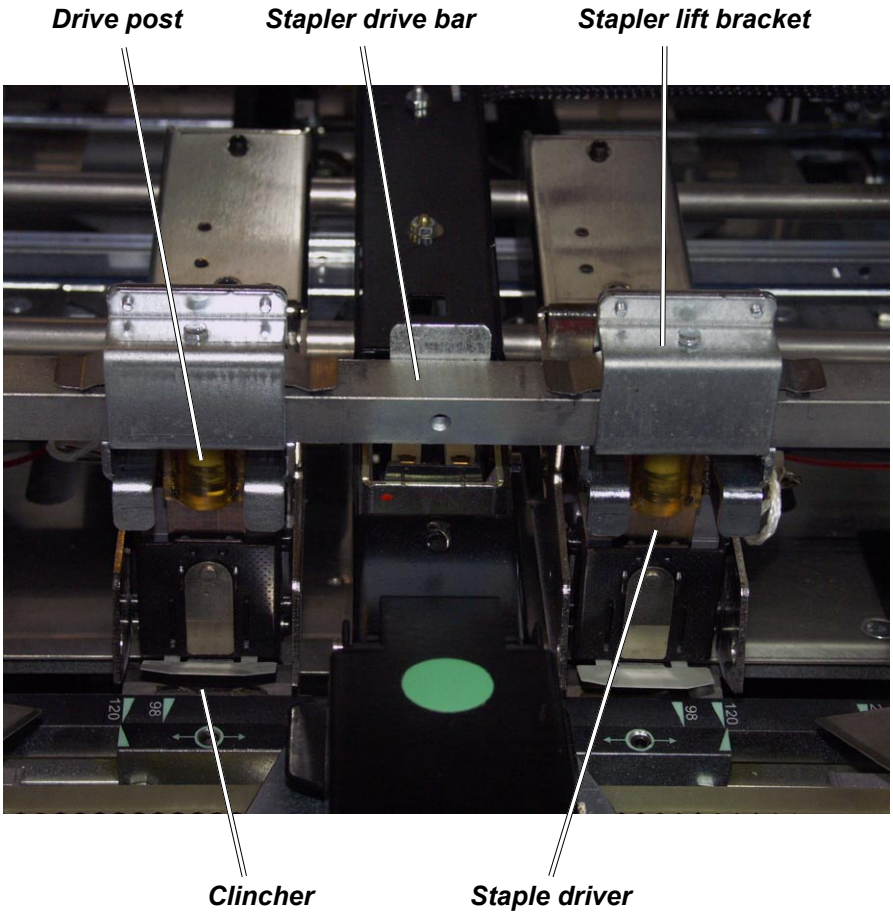
Maintaining Your Machines

⚠ **Caution**
Never attempt any maintenance function that is not specifically described in this documentation.

Booklet Maker

Lubricating Staplers and Clinchers

The parts that need lubrication are shown in the table below.



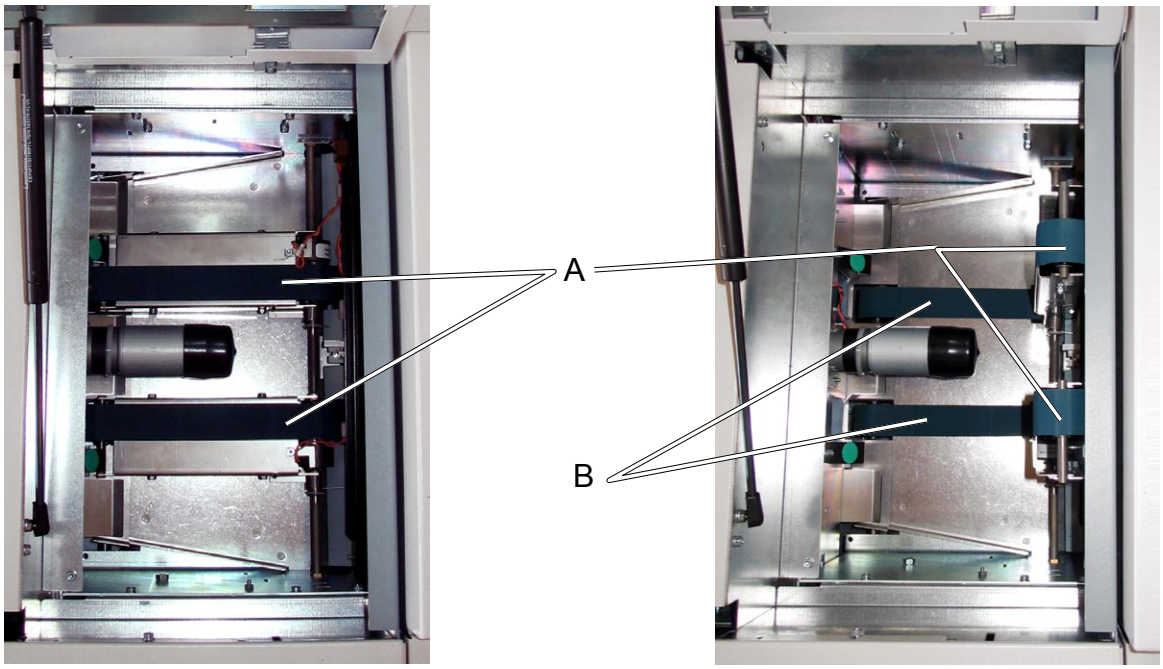
PART	FREQUENCY	PART LOCATION
Clinchers	Every 20,000 booklets	Beneath the stapler head assembly (thin oil)
Drive posts	Every 20,000 booklets	Staple cartridge (grease)
Stapler drive bar	Every 20,000 booklets	Above the stapler head (grease)
Stapler lift bracket	Every 20,000 booklets	Above the stapler head (grease)
Staple driver	Every 20,000 booklets	Staple driver (thin oil)

SquareFolder

Cleaning Feed Belts

The feed belts need to be cleaned regularly when in use, and if the unit has not been used for a period of time. How often this should be done, depends on the paper type and print quality. An increasing number of jams is one indication of the need to clean the feed belts. Clean the feed belts with water and a lint free cloth.

1. Open the top cover.
2. Clean the upper feed belts (A). The upper feed belts can easily be rotated in either direction.
3. Lift up the upper feed belts to access the lower feed belts.
4. Clean the lower feed belts (B). Rotate the lower feed belts towards the outfeed side for complete cleaning.
5. Place the upper feed belts in normal position.
6. Close the top cover.

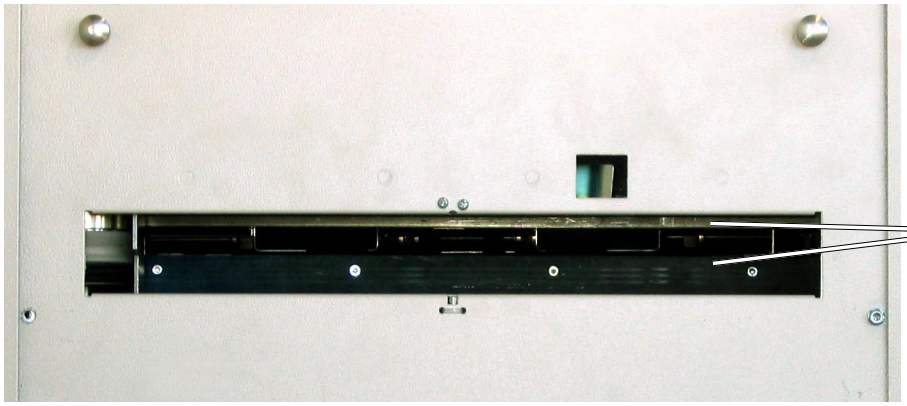


Upper feed belts in normal position

Upper feed belts raised

Cleaning Square Folding Clamps

Remove any residue from upper and lower clamps (A), which is the area clamping the booklet. Pay special attention to the right angled corners of the clamp profiles.



8. Specifications

Machine Specifications

Booklet Maker BM 2000

	Specifications	Remarks
Maximum Speed	3000 booklets / hour (A4 / 8.5x11” sheets)	
Paper Size, minimum (booklet making)	Width 120 mm / 4 3/4” Length 210 mm / 8 1/4”	
Paper Size, maximum (booklet making)	Width 320 mm / 12 5/8” Length 470 mm / 18 1/2”	
Paper Length, minimum (edge & corner stapling)	111 mm / 4 3/8”	
Paper Length, maximum (edge & corner stapling)	240 mm / 9 7/16”	
Paper Weight (Minimum)	60 gsm/16 lb. Bond	
Paper Weight (Maximum)	300 gsm / 172 lb. Index / 115 lb. Cover	
Input / Output Sheets	1 – 25 Sheets (80 gsm / 20 lb. Bond, equivalent)	Stapled
Input / Output Sheets	1 – 2 Sheets	Folding only
Hand feeding	Possible	
Weight	161 kg / 354 lb.	Including Stacker
Dimensions (L x H x D)	1520 x 1135 x 680 mm / 60” x 45” x 27”	Including Base and Stacker
Power Source	100 / 110 / 115 / 127 / 220 / 230 VAC 50-60 Hz	+ - 10%
Power consumption	25 W (15 W BM 2000, 10 W SQF 2000)	Stand by
	0.1 - 1 kW Maximum 1 kW	Continuous Operation for BM 2000+FTR 2000+SQF 2000
Safety class	Class 1	BM 2000+FTR 2000+SQF 2000
Protection class	IP X0	BM 2000+FTR 2000+SQF 2000

Trimmer FTR 2000 (option)

	Specifications	Remarks
Maximum Speed	2000 booklets / hour (A4 / 8.5x11” sheets)	
Minimum input sheet length for trimming	250 mm / 9.84”	125 mm / 4.92” booklet when folded to a booklet
Minimum trimming	*4 mm / 0.16”	
Maximum trimming	16 mm / 0.63”	
Minimum length, trimmed booklet	120 mm / 4.72”	
Maximum length, trimmed booklet	220 mm / 8.66”	
Paper Weight (Minimum)	Same as BM 2000	
Paper Weight (Maximum)	Same as BM 2000	
Input / Output Sheets	Same as BM 2000	
Input / Output Sheets	Same as BM 2000	
Hand-feeding	Possible	(Together with Booklet Maker)
Weight	83 kg / 183 lb.	
Dimensions (L x H x D)	350 x 1100 x 595 mm / 14 x 43 x 23”	
Power Source	From BM 2000	

* Maximum width of the finished, trimmed booklet is 220 mm (8”5/8). This means, when trimming SRA3 (450 mm) booklets, the minimum trim is 5 mm. When trimming 18” booklets, the minimum trim is 9 mm.

SquareFolder SQF 2000 (option)

	Specifications	Remarks
Speed	1800 booklets / hour (A4 / 8.5x11” sheets)	
Paper Weight (Minimum)	Same as BM 2000	
Paper Weight (Maximum)	Same as BM 2000	
Input / Output Sheets	Same as BM 2000	
Input / Output Sheets	Same as BM 2000	
Hand-feeding	Possible	(Together with Booklet Maker & Trimmer)
Weight	60 kg / 132 lb.	
Dimensions	350 x 1100 x 595 mm / 14 x 43 x 23”	
Power Source	From BM 2000	

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